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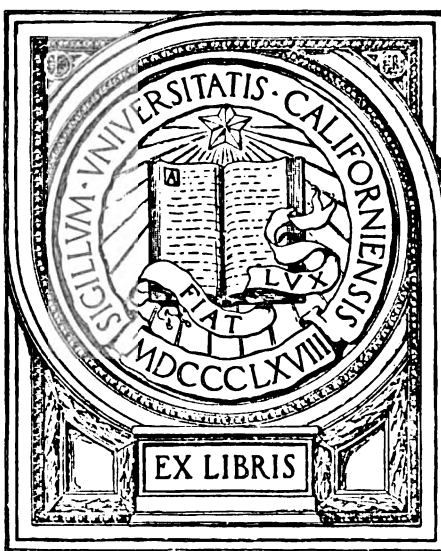


OSTEOSARCOMA OF CLAVICLE. Roentgenogram by Dr. Stover.



Denver Medical Times

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XERODERMA PIGMENTOSUM.

WM. H. DAVIS, M.D.,
Denver, Colo.

A rare disease, only a few over a hundred cases having been reported, of which about 20 occurred in this country.

It was first described by Kaposi from two cases seen by him in 1863. He reported two cases in 1870. Other reports in this country have been made by Taylor, Duhring, White, Bronson, Brayton, Hutchinson, Bowen and Hyde.

Symptoms: The disease begins mostly within the first year, especially from third to fifth month. A few cases have been seen in adults. The term *senilitas praecox* has been applied to young subjects,

The phenomena presented are pigmentation, atrophy, telangiectasis and new growth. There is first a macular or erythematous stage over the sites of its predilection with well marked freckling.

The lentigenes involve exposed surfaces of the body such as the face, neck, upper chest to the third rib, hands, forearms, and legs and feet if exposed. Patients are mostly of the blonde type, with reddish or light tinged hair and eyes. Between the lentigenes are whitish, atrophic spots.

Telangiectases are equally common characteristic. These may be stellate.

New growths visible in these areas are greatly in type. It is believed that all epitheliomatous in nature may be pea-sized or pointed warty growths. There is a distinct cir-

cumscribed epitheliomatous infiltration not producing a swelling. This is particularly so upon the lower lid, where ectropion ensues. According to Crocker, a suppurative lachrymation may cause an extension of the disease over the cheeks. Corneal opacities sufficient to obstruct vision may occur. The lips and buccal cavity may be affected.

The course of the disease is variable, some children dying of marasmus in a few months, others surviving to adult years. Sometimes the disease seems to be arrested for months at a time, but afterwards to re-awaken to activity.

The cause of the disease is not known. In some cases there seems to be a marked family predisposition. The sexes are about equally affected.

The influence of light upon the development of the disease in susceptible subjects seems to be of some moment.

The tumors and warty growths developed in the course of the disease have been examined repeatedly and sectioned, with findings of epitheliomatous aggregations of long branching cylinders enclosing epithelial cells (tubular type of cancer). Some of the tumors are typical instances of tubular epithelioma. There is a general agreement that the morbid process in a new growth is epitheliomatous.

Diagnosis: The early process of the disease is a combination of pigmentation, telangiectasis and atrophic patches, and the development in the

skin of warty growths—all of these are significant.

Case Report:

A. M. H., Denver City and County Hospital case.

Born September 21, 1883, in Ash Grove, Iroquois County, Illinois. Both parents born in same county. No fam-

and very soon after became lentiginous on face, neck and hands, which were the exposed parts. She has always since then been very susceptible to the direct sun's rays, which exposure is often followed by a vesicular eruption.

At 15 years there appeared a large, horny growth on lips, followed by a growth on the right side of the neck.



ily predisposition. No consanguinity so far back as known. Father descended from Irish-German-English stock. Mother's ancestry not known, but her maternal grandparents were not related. This child is the only one in the family affected, and was healthy at birth. On May 12, 1884, was exposed for about one hour to the sun through glass. When found, the face was red

These developed more generally over the face, there being seventeen lesions on the face and neck, and a few on the arms. She had the measles at two years of age. This is the only disease that she has had. The lesions were proved to be those of Xeroderma pigmentosum by pathologic examination made by Dr. R. C. Whitman.

A FEW NERVE CONDITIONS BASED ON LONDON CLINICS

R. H. FINNEY, M.D.,

Minnequa Hospital, Pueblo, Colo.

What little I shall say, is based on the clinics of two or three men of London: Doctors Bradford, Still and Russell, being on the list of the most able teachers. I have confined

Read before the Otero County Medical Society, February 13, 1913

vous system, or affections related to it. Simple facts, no details, and, in some cases, mere squibs, as naturally come during the informal clinic. Cases, of course, made things more clear.

CHOREA — (Bradford's Clinic): Once thought to be a lesion of the spinal cord, but since cases of hemichorea have presented themselves, the lesion is probably centered in the cerebral cortex, due to some alteration of cortical cells, with irritation. The relation of diseased tonsils, heart affections and rheumatic fever is apparent, with the belief that in the heart affections small emboli, from either a recognized or unrecognized endocarditis, clog the cortical capillaries, causing the irritation.

In dogs, apparently the same disease in the form of a distemper can be produced. To show that the sole cause is not infection, it has been found to exist in both sexes equally up to twelve years of age, and, after sexual changes, girls are much more prone. Also in pregnancy, it may occur the third or fourth month. The theory of fright is not so important as once thought.

The serious complications are: Hyperpyrexia, caused by the excessive cortical stimulation, and pericarditis. Prognosis is worse as age increases, and the outcome may be bad, even with comparatively slight symptoms.

Treatment: (As given by Still)—Isolation and complete rest for months, with six weeks as the lowest limit. Chlorotone, from three grains up. Fowler's solution in large doses, carefully watched. Aspirin in children or the salicylates in adults, with a double amount of bicarbonate of soda. Hot packs for half an hour if the case is excessively nervous. Heart must be watched for dilation and for pericarditis; first with effusion and sometimes later with the incurable adhesive type.

Myalgia Gravis (Russell): He showed a case, male, about thirty, something on the order of muscular atrophy, but without the marked atrophy. Weakening of the muscles, especially the masseters, the intercostals, those of the upper extremity, and lastly the diaphragm, with finally no ability to act. The peripheral nerves are affected, not known how, but shown by repeated faradic current, the muscles finally refuse to act, and, when the galvanic is used on the apparently paralyzed muscles, they contract, showing that the muscle fibers themselves are not affected. The cause is not known. Treatment does little or no good, and prognosis is bad.

Laryngeal Stridor in Infants (Still): The little crow or squeak, the baby turns blue, and, although fright may be given both mother and doctor, death is not often common. On being called the child may be found at the time perfectly normal, but during the examination it starts to cry, begins the crowing noise, holds its breath and turns blue. The child may be a mouth-breather, but examination of nose and throat is usually negative, with a possible exception of adenoids. Usually a marked rosary; reflexes normal. Often associated with rickets, and a question as to syphilis. Caniotabes, or the soft depressions felt in the back of the skull, is usually present. Not truly a disease, but a symptom complex of an unknown condition, associated with a nervous temperament, poor metabolism, tetany and convulsions. There is a question as to the relation of insufficient parathyroid secretion. If the reflex of the facial muscles, brought on by tapping the forehead or cheek is present, the outcome for convulsions is almost certain. During the attacks, cold douches to the face and neck may aid, and bromides should be given, if there is any tendency to convulsions.

Breast feeding must be insisted upon

and, if this is impossible, a starch and sugar diet may aid. The condition must be differentiated from congenital laryngeal stridor which, of course, is present from birth, the attacks not so spasmodic and not so much cyanosis. From croup, which comes on slower, usually at night, the attack is not so frequent as in the stridor, but lasts longer. From laryngeal diphtheria, which has a steady onset, not so spasmodic, constant difficulty in breathing and the breath not held.

Cerebral Circulation (Campbell):

The vascular membrane, the pia, is closely adherent to the brain and a great protection. The outer layer, the dura, hangs close to the skull, while in the spinal canal, there is a space between the dura and the canal wall, made up of small arteries and veins, allowing for more expansion than in the skull vault. The only space between the membranes lies between the pia and arachnoid, the middle membrane, and within this space, a fluid small in amount is secreted by the choroid plexus.

The arteries are end arteries, contain very little muscular tissue and no elastic tissue. The veins have no muscular tissue. As to hyperemia or anemia of the brain, experiments show that there are no nerves for vaso-motor control, but that the blood regulation is through the general body blood-pressure; that the amount of blood in the brain is the same all the time, but merely altered by the increase in flow, i. e., in hyperemia a faster flow, because of a higher pressure somewhere else in the body, the brain arteries enlarge by force, not vaso-motor, and the venous sinuses collapse.

It is not truly then a hyperemia or an anemia. The splanchnic system plays one of the biggest parts; a lax splanchnic system makes a slow thinker. In sleep; in shock; in heart fail-

ure, with low blood pressure; and in compression of the neck, this so-called anemia of the brain occurs—a slower flow of the blood. On decapitation, no blood recedes, showing the tight box effect of the skull and brain, with no increase of blood. On the other side, there are those who claim a vaso-motor control, the spasm of which causes epilepsy.

Differential Points Between Paralysis Agitans and Disseminated Sclerosis. (Russell):

1. Paralysis Agitans: After forty years of age.

2. Disseminated Sclerosis: Early life. Sex, no difference.

Cause. 1. Paralysis Agitans: Often after mental worry, fright, trauma, or infection; no real cause known.

2. Disseminated Sclerosis. More often following a toxemia. No real cause known, yet syphilis does not often, if ever, cause it.

Pathology. 1. Paralysis Agitans: No changes found beyond the sclerosis found in any senile cord.

2. Disseminated Sclerosis: Marked changes in the cord, the axis-cylinders intact. Also sclerosis of white and gray matter of brain.

Mental State. 1. Paralysis Agitans: Rarely any change, except after a long time, then mainly a depression.

2. Disseminated Sclerosis: Emotional, weak mind, and often demented.

Speech. 1. Paralysis Agitans: Often a hurried one.

2. Disseminated Sclerosis: Scanning.

Cranial Nerves. 1. Paralysis Agitans: No changes, except now and then the chin muscles contract. No optic nerve changes.

2. Disseminated Sclerosis. Optic neuritis and atrophy, and often other cranial nerve changes.

Reflexes. 1. Paralysis Agitans: Nothing definite, sometimes increased

and sometimes decreased or absent.

2. **Disseminated Sclerosis:** Varied. More often a decrease. Sometimes a decrease in one extremity, with an increase in the other.

Gait. 1. **Paralysis Agitans:** Shuffling, propulsion, retropulsion, no true Romberg.

2. **Disseminated Sclerosis:** Often a Romberg. Spastic.

Sensory Condition. 1. **Paralysis Agitans:** No changes.

2. **Disseminated Sclerosis:** Many times, various painful, anesthetic or tingling sensations.

Sphincters. 1. **Paralysis Agitans:** No changes, unless in last stages, when patient is worn completely out.

2. **Disseminated Sclerosis:** Often incontinence.

Disseminated Sclerosis Different From Cerebellar Tumor. (Russell).

1. **Disseminated Sclerosis:** May be severe headache and vomiting, but not constant.

2. **Cerebellar Tumor:** Both usually marked.

Cranial Nerves.

1. **Disseminated Sclerosis:** Any facial nerve may be affected—no rule. The nerve trunk itself is affected, probably not the nucleus.

2. **Cerebellar Tumor:** Picks out nerves on one side, and no paralysis results if tumor is intra-cerebellar; but if extra-cerebellar, say, between pons and cerebellum, palsy or paralysis of 5th, 7th or 8th nerves may result. As said before, on ophthalmoscopic examination the optic nerve is found to be atrophied, pale, with rarely a neuritis in disseminated sclerosis; while in cerebellar tumor there is always a reddening; choked disc; a regular optic neuritis, at least during the early stages.

Peripheral Sensations.

1. **Disseminated Sclerosis:** Often changes.

2. **Cerebellar Tumor:** No changes.

With a tumor between pons and cerebellum there may be signs of pyramidal tract degeneration, something on the order of disseminated sclerosis; but the more marked the signs the greater the extent the lesions of the pons, and less chance for operative results.

Why I speak of these nerve conditions is because we often get them mixed in diagnosis. Disseminated sclerosis is often put down as some cerebellar lesion, tumor, etc. Tumor is often missed, taken for disseminated sclerosis, tabes, etc.

Mental changes, varied sensory and reflex disturbances, scanning speech, nystagnus, ataxia, pale, atrophied optic nerve—usually put the trouble down as a disseminated sclerosis; while, with the fresh reddened optic nerve, terrible headache, vomiting, probably ataxia—point toward a tumor.

Brain abscess must, of course, be kept in mind, but here the heart, the lungs (empyema or bronchiectasis) and other organs must be looked into for possible source of original infection. A temperature and local tenderness on tapping the skull may aid in the diagnosis.

The cause of disseminated sclerosis is not known, but thought to be due to some toxemia. By the various specific tests, syphilis has practically been ruled out. Russell thinks that arsenic is still the only treatment, in fairly large doses; yet in the course of a few years the trouble usually terminates by an intercurrent disease.

To choose a subject relating to a foreign clinic is not easy. I find too many things of interest. One should not think of taking work abroad, especially if only for a short time, unless along some special line; else he finds himself buried in a vast amount of material, not gaining any one real benefit.

THE NEED OF A CLINICAL AND PATHOLOGICAL DEPARTMENT AT INSANE INSTITUTIONS.

H. G. MAUL, M.D.,

Pathologist to Nebraska State Hospital for Insane.

In performing post mortems I have been amazed to see how far physical signs fail to reveal the true pathological conditions; and in tracing these cases back how rarely a complaint is made, or any indications to suggest a difficulty, so that it requires utmost ingenuity to arrive at a diagnosis.

Mostly subjective symptoms can not be relied upon, for they more often mislead than help, leaving physical signs, careful observation and especially laboratory examinations the means to determine the pathology.

The following case will demonstrate how gross can be the trouble with not even a suspicion of its presence; Male, seventy-eight; confined at the institution for some eighteen years. On March 9th showed evidence of a septicemia, but patient ate well, slept as usual, ran a little temperature (nothing unusual among these patients), but he insisted that he was all right. On March 12th a beginning edema of the penis presented, which could not be relieved, but increased rapidly, patient showing no symptoms except frequent urination with difficult initiation, and the expression of a little pus at each effort. A diagnosis of purulent cystitis with secondary infection was made, and local treatment applied. At the post mortem the next morning, the left one half of the penis was gangrenous, the scrotum, region of the pubis and both groins edematous, and somewhat ecchymotic. After incising through the corpus spongiosum and opening the urethra, I found a cylindrical stone one cm. in diameter and two and one-half cm. long, very smooth and nearly filling the urethral lumen, and located one inch from the

anterior layer of the triangular ligament.

- A. Large stone in urethra.
- B. Broken fragment of (A).
- C. Large prostatic stone encysted.
- D. Sloughing bladder mucosa.
- E. Gangrenous glans penis and adjoining tissue.



It evidently had been there for months, as it was partially encysted, and following the urethra back to the bladder, another stone quite irregular, two and one-half cm. in diameter, was encysted into the left lobe of the prostate, so that about one-half protruded into the prostatic urethra. The bladder was twice as thick as normal, with areas of sloughing ulcerated mucosa. The lower one-half of the left kidney had undergone fatty degeneration with coagulation necrosis and contained a stone $1\frac{1}{2} \times 1\frac{1}{4} \times 2$ cm. There was also an accompanying pyelonephrosis. In conjunction with these findings, there was an enormous gall bladder containing 90 gall stones averaging the

size of a pea, with one of the larger variety impacted into the common bile duct about one-half inch from the intestinal opening. Yet this patient showed no more distress than is ordinarily manifested from a mild headache.

The blood examinations, smears and urine analysis were very helpful to determine a diagnosis here, as in many cases where the true condition is concealed.

RHUS TOXICODENDRON.

H. H. REDFIELD, M.D.,

Chicago, Illinois.

Professor of Therapeutics, Illinois Medical College.

Common name, "Poison Ivy." Dose of the tincture, one-half to one drop in water, of the standard granule, M. 1-10.

Physiological action: Locally, rhus toxicodendron acts as an irritant, and produces itching and a vesicular eruption of the cutaneous surface, which in some instances may extend to the mucous surfaces and be productive of redness and tumefaction. This is particularly true in those cases where the individual susceptibility to the action of rhus toxicodendron is especially marked.

The exhibition of rhus toxicodendron in large doses causes colicky pains in the entire abdomen, which become more pronounced at night. These pains are, as a rule, accompanied by diarrhea, the stools being bloody, and accompanied by great tenesmus. Hematuria is also present.

Therapeutics: Patients of a rheumatic diathesis, and who suffer from changes of weather, being wet by a sudden shower, or a draft of cold air, while in an overheated condition. They are very restless, the face wears an anxious expression, and the mind is apprehensive.

Lying or sitting in one position seems to aggravate the condition, and the patient is therefore constantly changing from one position to another in an effort to afford himself some re-

lief from the pains. These pains as a rule are dull and heavy, partaking more of the nature of the pain experienced in a sprain or bruise than those of rheumatism. The parts feels sore and as though they had been pounded with a hammer or mallet.

Campers who sleep on the damp ground, and become chilled, returning from their outing with a history of aching all over and with every muscle and tendon feeling as though it had been torn from its attachment, respond quickly to the action of rhus toxicodendron.

Joint or muscle pains which seem to become worse after midnight and are increased by wet weather or the patient being at rest, but which are relieved by motion, constitute some of the typical indications for the exhibition of rhus toxicodendron.

It should be studied in all cases of typhoid fever, when there is present a mild type of delirium, the patient is restless, and temporary relief is experienced by being in motion. He makes efforts to escape from the nurse and get out of the house. The tongue is the typical typhoid tongue—brown, dry, cracked, with the tip red and triangular in shape. Tympanites is marked, and a profuse diarrhea exists; the stools are voided involuntarily, have an extremely offensive odor, and are brown in color.

The limbs and back ache, and the patient complains of a frontal headache, which is relieved somewhat by pressure on the forehead.

It is the indicated remedy in lumbago or torticollis, when the patient experiences severe pain upon attempting to arise from the recumbent to an erect position. They complain of pains all over the head and back, and some relief is afforded by motion.

It should be exhibited and studied closely in all conditions where the patient gives a history of pains that are made better by motion, as relief of pain from motion is the cardinal indication for rhus toxicodendron.

In intermittent fever when in addition to the other symptoms, there is present a dry, tickling cough, which occurs during the chill, with vesicular

eruption and erythematous lesions upon the lips (hydraea).

In diseases of the skin characterized by edema, itching, and showing a vesicular eruption, all the symptoms being aggravated by cold air blowing on the patient rhus toxicodendron will give the most excellent results.

Scarlet fever patients who are drowsy and restless, the fauces swollen and edematous, tongue red and glazed or smooth, cervical glands enlarged and tender, the exhibition of rhus toxicodendron with phytolaccin will be productive of excellent results.

Rhus toxicodendron is a remedy of prompt and energetic action, and when given according to indications—pain relieved by motion—will seldom fail. It should be studied closely and its action compared with that of bryonin, aconitine, and atropine.

PICTURES FROM THE PHILIPPINES.

Philippines Constabulary.

Surigao, Mind., March 17, 1912.

Dear Doctor Hill:

I am sending you some photos of some rather curious cases, with notations.

I have quite a clinic every morning of civilians, but they are hard to follow or get a good history, for I have to use an interpreter to change from Spanish to their language (Visaya), and with my mistakes in Spanish, coupled with the mistakes of an interpreter, one can't be sure of his history; and then it is very hard to get them to use the remedies loyally.

There are a lot of 'Medicillos' here who oppose any change from 'custombre.' They are not licensed and are prohibited, but still exist.

What did you think of "Expansion of the Races"?

Fraternally yours,

J. M. BROWN.



The result of a non-intermittent ligature applied by one of the natives right after his comrade had been bitten by a poisonous snake. The bones had undergone a dry caries.



A case of double hydrocele, possibly elephantiasis (doubtful). By puncture removed 3 liters from right and 1 liter from left. Injected Lugol's solution. Results are fair (one-fifth the size) and I think ultimately good. Tunica much thickened. I have punctured six since I arrived and have three waiting.



Probably a case of "Yaws" (native name Tubucas) of some years' duration. Note sears on arms. No bone destruction, negative leprosy. The child is her own and apparently healthy. Not married.

LATITUDES.

E. S. GOODHUE, M.D.,
The Doctorage, Hawaii.

The Hawaiian Islands lie between $18^{\circ} 50'$ and $23^{\circ} 5'$ north latitude, and are therefore, just within that part of the earth's surface called the tropics.

Kauai, the most northerly island, barely escapes the southern border of the tropic of Cancer, and Hawaii, the largest and most southerly island, sticks a small point just below the 19° of north latitude. In longitude west, the archipelago occupies a space from $154^{\circ} 40'$ to $160^{\circ} 50'$, extending south-east to northwest over 300 miles; it is in the torrid zone.

The very name reminds one of sizzling heat, long sultry nights, those equatorial regions of the earth where human beings pant for air to breathe. But it is no such thing.

Again the mere geographical position must be overlooked, as it has always been by the weather clerk, and the modified reality considered.

Comparatively small in area, the islands are surrounded by a cool ocean, lying in the path of that wonderful stream which cools Peru, and places Hawaii out of the class of most islands situated in the warm belt.

These currents are great meteorological iconoclasts, knocking latitude out of all orthodox relation with temperature curves, and zigzagging isothermal lines in erratic passages over the earth's circumference.

Here is the Gulf stream 84° in summer, and warmer than the ocean under the equator, losing only 14° in mid-Atlantic, and 4,000 miles off warming the British Isles and more or less all the neighboring lands.

Compare the vernal shores of England, Ireland and Scotland, with the barren coast of Labrador; Norway with Greenland; Lisbon with Washington. Travel to Sitka, 57° north latitude, then go to Halifax, which is in latitude $44^{\circ} 39'$, and what a country gets from its surrounding waters.

Contrast the yearly mean temperature of San Diego, Charleston and Vicksburg, or any California location, with any Atlantic point at the same or about the same latitude. Think of the kindly influence exerted by the Kuroshiwo as it bathes Japan, Kamchatka and the whole Aleutian trend down to California!

Leave Hawaii and travel about east till you begin to perspire in Yucatan and Hayti; see how the climates of Sahara, the Red Sea, the interior of Arabia, Nagpur and Calcutta compare with that you left in about the same latitude.

Then still further modify your geographical temperature curve by a constant northeast movement of air with all the salted freshness of the sea, fanning your cheek all day long.

Finally, relieve your sea-level atmospheric pressure of as many pounds as you wish by climbing the gradual slopes of mountains which pass up into frigid climate.

Thus it is with all countries washed by the sea; you may find them by their latitude and longitude, but outside of a very general idea, you will have no

knowledge of the real character of their climate until you have learned what sort of a climate they really have.

Their climate is determined by their latitude just about as accurately as a man's virtue is by the titles which may be placed at the end of his name.

They signify a good deal if they do; and that's about all. And what one of our climatologists has said is true:

"In prescribing climate—the greatest care and discretion must be exercised; as the able surgeon knows well his anatomy, so the medical adviser should be acquainted with meteorologic facts and climatic data relative to a given resort."

After latitude the chief factors in making a climate are:

Altitude.

Distribution of ocean currents.

Proximity of mountain ranges.

Proximity of large bodies of water.

Rainfall.

Winds.

Soil.

The average weather conditions of a place based upon the phenomena of climate are temperature, atmospheric pressure, wind-force, humidity, sunlight and electrification

In considering the climate of Hawaii, let us look over some observations taken in Honolulu by the territorial meteorological officer for the year 1903:

Altitude, sea-level.

Location, leeward side.

Surrounded by the ocean—flanked by a range of mountains on one side.

Rainfall, 38.58 inches.

Temperature, mean annual, 74° F.

Highest temperature recorded, 88° F.

Lowest temperature recorded, 52° F.

Atmospheric pressure, May, 30.06.

Atmospheric pressure, November, 29.96.

Average mean, 29.99.

Relative humidity, annual average, 72 per cent.

July, 68 per cent.

December, 76 per cent.

Winds — northeast trades blowing for 256 days in the year.

Soil—everything porous, absorbing moisture rapidly.

Average annual cloudiness, 44 per cent.

Monthly average, 40 to 50 per cent.

On leeward Hawaii the average annual relative humidity is lower, while the summer and winter maximum is reversed, as the rainy season occurs from February to November, with an average rainfall of 7.62 inches a month.

Very often, however, there is no dry season, and showers fall during all the months of the year.

As may be seen from the foregoing, latitude is no drawback to Hawaii as a health resort, nor as a permanent residence for the Anglo-Saxon who has lived the most of his life in a geographically temperate zone, where the winters are extremely cold and the summers extremely hot.

Speaking of tuberculosis, Dr. Kime

says that "equally good results are obtained on the mountain top or at the sea-level," and Dr. Bridge: "One of the best of all treatments for pulmonary tuberculosis is a new climate—and the best climate for the disease."

Dr. Turner, in his "Hygienic and Medical Reports," claims that 70° is the relative humidity best adapted to maintain health, and Dr. Remondino believes that "a purely sea-atmosphere has everything in its favor: freedom from impurities, either palpable or gaseous; a constant uniformity of humidity and of temperature, with constant mobility as a body rendered unavoidable by the winds constantly playing over its surface."

Dr. H. M. Smith, in a paper on "Heat and Humidity," tells us that "a temperature of from 65° to 68° F., with a relative humidity of 60 per cent, produces the most comfortable and healthful conditions. The few summer days that really make us suffer in the climate of New England, are those in which high temperature is combined with moist atmosphere."

ADULTERATED AIR.

J. N. HURTY, M.D.,

State Health Commissioner of Indiana.

Adulterated air killed 8,018 people in Indiana in 1911, brought coughs, colds, la grippe and pneumonia to over 1,000,000 and started at least 4,000 on the consumption list.

If opposition, to one-tenth of the popular force prevailing against adulterated foods, could be aroused against adulterated air, the people would profit enormously in money, strength, and happiness. Not a single death or case of illness has been reported as caused by adulterated food in Indiana in ten years.

Sausage adulterated with corn meal

will not cause illness, nor will butter adulterated with oleomargarine, nor milk with water, nor maple syrup with sugar, nor molasses with glucose, nor lard with vegetable or beef fat, nor pepper with ground coca shells, nor whiskey blended with water, high wine and prune juice, nor candy with glucose, nor olive oil with cotton seed oil. Over ninety-five per cent of all adulterants are harmless to health. They affect mostly the pocket of the consumer and the morals of the adulterator. But—adulterated air sickens and kills thousands. Adulterated air costs the

people one hundred dollars to one for adulterated foods.

Adulterated air causes anemia, malnutrition, headache, weakness, dullness, dizziness, and other ills and symptoms, and by reducing vitality reduces resistance, and thus disease causing microbes are admitted to the body. Consumption, la grippe, cold and pneumonia microbes, cannot find entrance into the lungs until the delicate vascular network of the latter has been abused by liberal allowances of adulterated air for a greater or less period of time. Fresh air is the premier tonic, vitalizer and appetizer. Every business man who leaves his stuffy office and goes fishing will testify to this statement. He leaves early in the morning in the crisp, fresh air, and by noon his appetite is sharp, his food tastes as it did in boyhood, and his digestion is vigorous. That night his pillow is not hot, he does not toss and lie awake, but he goes to sleep immediately and awakes refreshed. The appetite, the delicious taste, the restful sleep comes from the unadulterated air. The worms and minnows he impales upon his hook do not bring him those blessings, nor does the fruitless whipping of the stream do it, except do these help to fill him with unadulterated air.

Adulterated air costs the people of Indiana not a penny less than \$10,000,000 annually. The doctors, the druggists, the coffin makers, and the undertakers wax fat, because of the universal and excessive use of adulterated air. The efficiency of school children increases twenty-five to forty per cent by taking them out of indoor rooms and placing them at their desks out of doors. They grow rosy on unadulterated air; they are eager to study and to work; appetite and digestion re-

turn; they grow fat, strong and happy. They also progress more rapidly in their lessons than the indoor pupils.

Everywhere we find adulterated air. In the editorial rooms, legislative halls, school rooms, churches, theatres, street cars, steam cars, sleeping cars, trolley cars, bed rooms, parlors, libraries, railway stations, taxicabs, dry goods stores, groceries, shoe stores, quick lunch rooms. In moving picture shows thousands daily suck in, breathe in, absorb and revel in adulterated air. No wonder that almost one thousand die every month in Indiana from breathing adulterated air. No wonder that thousands are made sick. The wonder is, that more damage is not done.

With great pleasure we have passed and enforced laws against adulterated foods, which so far reported, have not caused a single case of sickness and not one death. And now, do you not think it would be wise to pass laws against adulterated air, which causes such awful havoc of health, life, happiness and wealth? Is it not likely that if we could swat some one for supplying us with adulterated air we would do it as eagerly as we now swat those who supply us with adulterated foods?

Let us begin by swatting the moving picture shows, then extend the swatting to the street cars, the suburbans and steam cars. Next, swat the court rooms, the council chambers and legislative halls. Then, swat the hotel lobbies, the state house corridors, the school rooms, and above all, swat and reswat our bed rooms. At last, let us swat our offices, parlors, and libraries. Oh! the years we waste, the strength we waste, the happiness we waste, the wealth we waste, through breathing adulterated air.

REQUISITES FOR CONFINEMENT CASES.**MORRIS J. KROHN, M.D.,****Denver, Colo.**

When engaged for a maternity case, after giving my patient directions along the line of hygiene and management of pregnancy, with reference to the exercise, diet, bowels, breasts, urine, et cetera, I usually furnish her with a typewritten copy of the following list, as requisites for her confinement:

These written directions have saved me considerable trouble and delay at the time of labor, as the patient has had sufficient time to obtain these articles, thereby increasing her comfort, as well as my convenience.

"Please provide and have ready for use, the following articles, which are necessary for your confinement:"

1. Two pitchers, one for hot and one for cold water.
2. Two basins for washing the hands.
3. A three-quart fountain syringe.
4. A bed-pan (granite or porcelain).
5. A rubber sheet or an oil cloth, to protect the bedding.
6. Two bed-pads (made of cotton).
7. Bed linen, such as sheets, pillowcases, et cetera, freshly laundered.
8. One dozen towels.
9. Three abdominal binders (made of muslin).
10. Two breast binders.

11. Two dozen sterile vulvar pads.
12. Four sterilized T. bandages.
13. Four night gowns.
14. One pair of obstetric, or extra long white stockings.
15. One pound of absorbent cotton.
16. Five yards of sterilized gauze or cheesecloth.
17. Old pieces of linen.
18. One bottle of vaseline.
19. Whiskey or brandy.
20. Two cakes of castile soap.
21. One nail brush (new).
22. Safety pins (large, two dozen).
23. Plenty of clean newspapers.
24. A house thermometer.

For the baby it is necessary to have in readiness the following:

1. Diapers (canton flannel, at least two dozen).
2. Flannel binders or belly-bands.
3. Flannel slips and undershirts.
4. A blanket or shawl.
5. Two ounces of sweet oil.
6. Talcum powder (borated).
7. White castile soap.
8. Safety pins (small, two dozen).

This list does not include baby clothes.

The above outfit should be kept in a clean trunk or box, until ready for use at the time of labor.

MEDICAL PROGRESS**NON-SURGICAL TREATMENT OF CONSTIPATION.**

By Dwight H. Murray, M. D., of Syracuse, N. Y.

(Abstract of Paper, read before the American Proctologic Society).

Dr. Murray stated that chronic constipation and its results was one of the worst of the foes to a healthful human race.

He had never known any medication to cure cases of constipation. As primary causes of all cases of constipation he considered carelessness, ignorance and laziness to be of first importance. The whole medical profession should teach their clientele how to care for themselves, and to train their children in order that constipation could be eliminated by educational and prophylactic methods.

Medicines for the use of constipated people have increased until their number is almost countless. Advertisements which extol particular cathartics exploited by this or that pharmacist, are well nigh bewildering.

He makes the claim that all cathartics finally leave those who use them worse than before. He does not entirely interdict the use of drugs, as there are cases where they must be used, but almost wholly for temporary relief. He says that a mistaken notion exists in the minds of the laity that the feces is composed largely of debris of food. This, however, furnishes only a comparatively small portion of the fecal mass, the largest portion being deposited in the large intestine as the ash resulting from the products of metabolism.

He mentions various exercises, massage, deep breathing, climbing, rowing, electricity, etc., as being helpful in the treatment and cure of these cases.

Sigmoid injections of pure olive oil, castor oil or medicinal paraffin oil were recommended as aids in the treatment.

He said that hours could be spent over the various drugs and methods in detail. After it all we would be obliged to say, that eternal vigilance as to regularity on part of the patient must be exercised or a cure would not result.

The keynote of his paper is, education and regularity as to periodicity of the first daily stool. Finally he believed that the whole profession had a profound duty to perform for mankind in an educational way for emancipating the race from this insidious foe.

Calcium Chlorid in Bronchial Asthma. C. Kayser (quoted in *The Prescriber*) has found this drug a useful prophylactic in cases of bronchial asthma. He gives a 5 per cent solution in tablespoonful doses in milk every two hours, and finds that it eases respiration, and causes the bronchial secretion to come away without difficulty.

Thyroid Extract in Rheumatoid Arthritis. W. J. Midelton (quoted in *The Prescriber*) advocates small doses ($\frac{1}{2}$ grain or more 3 times a day), never pushing the remedy so as to cause headache or diarrhea, and stopping the drug for a few days at intervals. A dose of 5 grains 3 times a day should be given only in cases which show definite myxedematous symptoms.

Prevention of Collapse in Pneumonia. Acting on the rule of Gibson that whenever the blood pressure in millimeters of mercury is below the pulse rate per minute there is danger of collapse, S. S. Cohen (*May Critic and Guide*) uses cocain hydrochlorid ($\frac{1}{2}$ grain hypodermically every 3 hours until the pressure is well above the pulse rate) to increase vasomotor tone. He has never observed any symptom of cocain poisoning or induction of the cocain habit. When, as sometimes happens, cocain alone is insufficient, he gives also the adrenal principle (20 to 30 m. of 1:1000 solution intramuscularly), or he substitutes for the cocain caffein sodiobenzoate or Caffein sodiosalicylate (2 grains per dose). He says that strychnin and atropin are useful at times to maintain the effect when for any reason it seems inadvisable to push the cocain. When the heart itself is weak, he administers camphor (a syringeful of a 10 per cent solution in sterilized olive oil) conjointly or alternately with the cocain.

The Hot Bath. The Japanese are said to be accustomed to indulge frequently in very hot baths. That such baths (112 degrees to 120 degrees) are tonic and not enervating, is maintained by E. S. Goodhue in the May issue of the *Dietetic and Hygienic Gazette*. He says: "Pain due to neuritis, sciatica, rheumatism or injury is relieved, and in the incipient stages of 'cold,' where there is sneezing, coryza and sensations of chilliness, the hot bath is almost a positive relief." "For ordinary health, baths at a temperature of 112 degrees F. are comfortable and adequate; you may stay in such a bath from twenty minutes to half an hour, without visible perspiration. In fact, it is better not to induce sweating unless for a specific purpose, as taking a bath at the beginning of a cold; or where free diaphoresis is wanted. This will be secured by immersion in water at a temperature of from 115 degrees to 120 degrees F. After taking such a bath the patient should go to bed to get the full effects of excited glandular action."

Potomatin Poisoning. Richard C. Cabot, in discussing a case of vomiting, says: "I mention the phrase 'potomatin poisoning' because I have so frequently heard it used in cases of this kind, as well as in perforative

appendicitis, intestinal obstruction and other acute abdominal emergencies. The phrase seems to be a favorite 'blind' behind which our ignorance or error may be concealed. I have never yet known a single case in which the diagnosis was justified by any sufficient chemical examination either of the food supposed to be responsible for the trouble or of the contents of the gastrointestinal tract."

The Causes of Ascites. From a study of 5,000 cases occurring in the Massachusetts General Hospital, Richard C. Cabot (quoted in *American Journal of Gastroenterology*) mentions, in the order of their importance, cardiac diseases, nephritis, cirrhosis, tuberculous peritonitis (slow accumulation of fluid), intestinal obstruction, small solid tumors of the ovary, abdominal neoplasms and adherent pericardium. Pleural effusion may be produced by an extensive ascitic accumulation, and disappear with the removal of the cause of the latter.

Unmerited Syphilis. The data gathered from various sources are now sufficient to cause careful observers to estimate that from 20 to 24 per cent of cases of syphilis are not communicated along the venereal route, says Charles H. Bangs in the *American Journal of Dermatology*. Fournier has tersely summed up the situation by saying, "Syphilis is very far from being the equivalent of a certificate of debauch; it only signifies an unfortunate contagion." Scheuer, in 1910, compiled reports of over 25,000 cases of extragenital infections, comprising, in round numbers, 6,000 upon the lips, 1,600 inside the mouth, 1,600 upon the tonsils, 700 in the nasal passages and pharynx, 500 on the tongue, 150 on the gums, 1,000 on the eyelids and conjunctivae, 400 on the chin, 350 on the cheek, 300 on the nose, 100 on the forehead and temples, 80 on the ears and scalp, 1,400 upon the fingers and hands, 3,300 upon the trunk (of which nearly 3,000 were upon the nipples), 250 upon the legs, 150 on the arms, and 300 were anal chancres.

A Simple Stain for the Spirocheta Pallida. Ruth Tunnickliff of Chicago (Memorial Institute for Infectious Diseases; J. A. M. A.), has found that the organism stains readily (usually in two or three seconds) with a 10 per cent mixture of a saturated alcoholic gentian-violet solution in 5 per

cent phenol. The smears, which should be very thin, may be fixed in the flame, although no fixation is really necessary.

Chancres and Chancroids. G. B. Tribble, P. A. Surgeon, U. S. Navy (*Virginia Medical Semi-Monthly*, May 10), holds that the so-called chancroid is, in most instances, of syphilitic origin, as shown by the finding of spirochetes and a positive serum reaction. There were 35 cases of chancroid admitted to the Naval Hospital, Norfolk, Va., during 1911. Of these cases, 11 were proved syphilitic with the microscopic and the serum test, and 10 of those discharged to duty came back with typical secondaries. On several occasions he has observed multiple primaries not in contiguity; for instance, one on the thigh and another on the abdomen, one on the dorsum of the glans and another on the scrotum. In the case of a master-at-arms, bitten by a syphilitic, there were lesions on the hands and fingers.

The Oatmeal "Cure" in Diabetes.—Von Noorden's oatmeal diet has proved of great value in some cases of severe diabetes mellitus. The gruel is made by adding to 250 gm. cooked American oats the same weight of washed butter, mixing thoroughly while hot and serving through the day (fried, if desired) in three or four portions, allowing also one or two eggs at each feeding. It is best, says Faltz (*S. Souse*, in *Interstate Medical Journal*), to keep the patient on as low carbohydrates (vegetables) as he can stand without danger, for two days before the "cure," then give the gruel for 3 or 4 days, then two more days of vegetables, and in case the desired result is not obtained another course of oatmeal.

Rectal Treatment of Acute Circulatory Weakness.—Prof. T. Rumpf (Post-Graduate, October, 1911), often administers an enema of camphorated oil (1:10 or 1:5), morning and evening with favorable results. One gram of camphor may be combined with 2 cc. of ether and 8 cc. olive oil.

Vibratory Treatment of Obstinate Constipation.—Boardman Reed (*Southern California Practitioner*), employs general vibratory massage of the muscles daily from 10 to 14 days; semi-weekly vibratory stimulation for one minute each over the interspinous spaces on either side of the first three lum-

bar vertebrae; and at the same time the application of the intrarectal vibratode for 1 to 1½ minutes. He also recommends enemas of olive oil, and if there is a complicating colitis he adds to each enema ½ to 1 teaspoonful of bismuth subcarbonate.

Suicide by Quinin.—A young woman in Newark, N. J., (Medical Record), killed herself recently by taking 188 grains of quinin, in the form of pills. She was driven to take her own life, it was said, by despondency following an operation for appendicitis three weeks before.

Some Uses of Citric Acid.—This acid and its salts have been shown by Wright and others to lessen markedly the viscosity of the blood, and hence to be of service in threatened eclampsia, brawny swelling and edema of larynx and pharynx. It can be given in doses of 5 to 30 grains in sweetened water. Henry B. Hemenway (J. A. M. A., April 6th), has seen remarkable results in amasarca and albuminuria of pregnancy from the administration of the following formula: Citric acid, 30; liquor sodii phosphatis comp., 80; aquae, 40.—Teaspoonful in a full glass of water every 3 hours; later, 20 minutes before each meal and at bedtime. If a rheumatic or gouty condition is present, he combines 30 sodium citrate with 20 sodium salicylate in 120 parts of water, giving a teaspoonful in a cup of hot water half an hour before each meal and at bedtime. In cases of anemia he suggests the following formula: Citric acid, 15; soluble citrate of iron, 4; water, 120.—Teaspoonful with water before each meal and at bedtime. In catarrhal gastritis, with large quantities of viscid mucus, the citric acid frequently gives great relief, though in acute gastritis and in infants the citrate of sodium or potassium is preferable to the free acid.

Quinin Bisulphate as a Local Remedy in Urethritis.—Albert E. Mowry, clinical assistant in genito-urinary surgery, Northwestern University Medical School, has used with gratifying results, urethral vaginal irrigations of hot water containing a teaspoonful of quinin bisulphate in two quarts of the water. As an injection for the patient's own use he prescribes one dram of the powder to 4, 6 or 8 ounces of water, with directions to the druggist to filter the mix-

ture. The remedy is not only strongly bactericidal, but distinctly anesthetic as well.

The Indications for Capsicum.—An editorial in the November Eclectic Medical Gleaner outlines the indications for this valuable but neglected stimulant as follows: Lack of buccal, salivary or intestinal secretion. dry tongue, with sordes on the teeth, and muttering delirium; dry, harsh tongue, with lack of salivary secretion in low fevers; congestion; cold extremities, with weak pulse and blanched lips; delirium tremens of the non-boisterous type, with inability to take food or to sleep; atonic dyspepsia and the gastric catarrh of drunkards; marked depression and debility wholly functional; chronic hemorrhoids from relaxation.

A New and Simple Reaction for Syphilis.—The editor of the Medical Record (Nov. 25, 1911), reports Noguchi's recent announcement that he had obtained a cutaneous reaction in the diagnosis of syphilis, comparable to the von Pirquet test for tuberculosis. Sterile suspensions of spirochetes were prepared by Noguchi and designated luetin. This was employed by means of cutaneous injections (0.05 cc.) on syphilitic rabbits and on about 400 human beings, of whom 300 were cases of syphilis in its various stages. There was no reaction in the normal and non-syphilitic diseased individuals, whereas in all the tertiary cases there was a positive reaction consisting of induration and erythema, followed by pustulation. The reaction was fully manifest in cases treated regularly with salvarsan or mercury, though the Wassermann reaction was weak or negative. In primary syphilis the reaction was nearly always negative (cutaneous anaphylaxis not yet developed). In secondary syphilis the positive reaction was obtained in more than one-half of the cases that had been treated with mercury, and in more than two-thirds of the cases that had been treated with salvarsan. Ninety per cent of the cases of hereditary syphilis showed a markedly positive cutaneous reaction, which was also the case with instances of latent syphilis, in which neither symptoms nor a Wassermann reaction were present. It is reasonable to expect that this simple test will in the course of time supersede the much more complicated hemolytic reactions, particularly in latent and obscure cases.

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THE NEW MORAL CODE.

A clear portrait of that industrial pressure which forces young women to prostitution can but serve to stir up our social conscience.

Terrible indeed is the arraignment we face when we read that two young Swedish girls in San Francisco seek death by drowning, rather than turn to immorality.

From a foreign land they viewed free America as the land of promise and, after six months' residence here, death itself was sweeter than the freedom we gave.

The impossibility of a livelihood with a living wage is given as the reason for suicide, and social workers know well the life and death struggle of the underpaid toiler.

Over against this force driving the girl to shame, are the double standard of morals creating an enormous de-

mand, and the large commercial gains from the traffic in women.

It is this double standard in practice which takes advantage of the girl and her economic needs, and has made part of our civilization a slavery which has never been paralleled.

The right to labor, the right to a living wage, the right to live without the ever-present Nemesis of a bondage which destroys body and soul belongs to all.

The number of those seriously asking, "Am I my brother's keeper?" is constantly increasing. We are more and more coming to a realization of individual responsibility, of the necessity for widespread information on sexual affairs and a more definite knowledge of the minimum wage for honest living and, most important of all, the recognition of a single standard of morals.

It has long been recognized by the profession that a life of continence is best for the individual, and that indulgence has a constantly increasing train of evils of which disease, illegitimacy and hideous slavery are the most glaring.

In the past decade we have been measuring up good and ill and turning the light of publicity on the moral assets and liabilities of our present civilization, so that armed with absolute knowledge we may overcome the evil with abounding good.

The action of the New York City Health Board in officially recognizing venereal diseases as contagious and reportable is just and in keeping with the text of the civil law and the spirit of the time. The educational value of such a step cannot be overestimated.

The medical profession did not need the investigation and report of the Chicago Vice Commission to be assured of the prevalence of venereal diseases, but it did need just such a report to emphasize three things: the wide spread commercialization of vice, the far-reaching effects of the double moral standard, and the economic injustice meted out to women.

We are glad that the profession can do its part in solving complex sociological problems and in making popular and expedient the new moral code.

The work of social health organizations, composed largely of physicians, fills us with incentive and hope.

M. E. V. F.

SOME FAMOUS INVALIDS.

As physicians we may notice that chronic diseases (excepting those of the brain) have a refining influence upon many of our patients, rendering them more intellectual, if at the same time somewhat petulant and finical. While most famous individuals have been of the literary persuasion, yet there are not wanting valetudinarian

statesmen and warriors (for example, Alexander H. Stephens and William of Orange) who have left their "foot-prints on the sands of time."

The health of the great Roman poet, Horace (Quintus Horatius Flaccus) was always delicate, and at 44 his black hair had turned to gray. He lived mainly on fruits and vegetables, "bacon and greens" being one of his favorite dishes.

Alexander Pope, the most successful of all poets in harmonizing sound and sense, was slight and delicate, had defective eye sight, and was so deformed that he was sometimes referred to as the human interrogation point. Though dead nearly two centuries, his translation of Iliad is still a standard.

William Makepeace Thackeray was a "pretty, gentle boy," who ripened into the greatest novelist of the 19th century, despite a number of severe illnesses, which seemed only to mellow his character from that of a merciless satirist to a genial humorist and philosopher.

Robert Louis Balfour Stevenson died at the early age of 55, having had consumption during the last third of his life. He suffered severely, but worked with the utmost industry and endearing cheerfulness to the end in his beloved Samoa.

Dr. George M. Gould is probably right in his opinion that Thomas Carlyle's ill-health and crotchety humors were due to astigmatism, but Carlyle's own very interesting description of the origin of his chronic dyspepsia is as follows: "For one or two or three and twenty years of my mortal life I was not conscious of the ownership of that diabolical arrangement called a stomach. I had been destined by my father and my father's minister to be myself a Minister of the Kirk of Scotland. But now that I had gained the years of man's estate, I was not sure that I believed the doctrines of

my father's Kirk, and it was needful that I should now settle it. And so I entered my chamber and closed the door. And around about me there came a trooping throng of phantoms dire, from the abysmal depths of nethermost perdition. Doubt, Fear, Unbelief, Mockery and Scoffing were there, and I wrestled with them in the travail and agony of spirit. Thus was it for weeks. Whether I ate I know not; whether I slept I know not; but I only know that when I came forth again beneath the glimpses of the moon it was with the direful persuasion that I was the miserable owner of a diabolical apparatus called a Stomach. And I never have been free from that knowledge from that hour to this; and I suppose that I never shall be until I am laid away in my grave."

THE POET OF THE PACIFIC.

That ancient and eminent furunculologist, Job, is reputed to have said, "Oh, that my words were now written! oh, that they were printed in a book!" Likewise, "My desire is * * * that mine adversary had written a book"

Dr. Edward Solon Goodhue, nicknamed "the Poet of the Pacific" by his friend, Jack London, has written a number of books, three of which were in such demand that they are now out of print. In his latest volume, a collection of poems entitled "Songs of the Western Sea," he continues to vibrate the same sweet chords as awoke the admiration of those who read his "Verses from the Valley," which was issued from the press 25 years ago. The following excerpt from his poem, "Beyond the Sun," il-

lustrates his love of nature and the winning witchery of his style:

"When sky above and sea below re-
flect each other's blue,
Flecked by the scurrying cloud and
scudding wave;
When rain drops lave
Green fields and leaves till they seem
born anew;
When trees throw up their arms in
glad acclaim,
And all the world is bright with sun
and shine—
Nothing to me seems low, or mean,
or lame,
But sweet and radiant, holy, pure, di-
vine!

"Then comes a sense of kinship with
all things: rock, sky, and sea,
Uplifted palms, the soft, transparent
air—

So bright, so fair—

Each one a brother and a part of me!
One pulse, one breath; one conscious
flow of life

Which cannot end, but only change its
form

In gentle sequence without stress or
strife;

God's just equivalence for calm or
storm!

"So, sharing in the universal joy,
A kindred soul, I sit this happy day,
And sing and pray—

But no worn theme my grateful
thoughts employ.

For me Death is transmuted Life, and I
Fear not the quiet lapse that make me
one,

With all the dear immortal souls which
die

Into the other life beyond the Sun."

PERSONALS

By the Editor and Associate Editors.

Dr. Hubert Work "took in" Atlantic City recently.

Dr. Herbert W. Lane, of Canon City, died May 20th.

Dr. Edward Delehanty has returned from a visit in the East.

Dr. Root of Salt Lake City was visiting in Denver, June 14th.

Dr. C. F. Wilkin of Laporte, has recovered from a severe illness.

Dr. Obadiah F. Higbee has removed from Manzanola to Fowler.

Born to Dr. and Mrs. Ernest Emery a son on the 23d of June.

Dr. L. A. Bean has been appointed city veterinarian of Denver.

Pueblo physicians are planning a course of clinics throughout July.

Dr. W. A. Jayne recently visited New York and other eastern cities.

Dr. and Mrs. Wm. S. Bagot have taken apartments at the Perrenoud.

Dr. Charles Stewart of Salt Lake City was a recent visitor in Denver.

Dr. James B. Brown has been taking several weeks' vacation in the East.

Dr. E. R. Robinson and family of Pueblo have gone to Canada on a visit.

Dr. E. I. Raymond of New Windsor was a caller at the sanctum, June 8th.

Dr. P. D. Russell is away from Pueblo on a trip to New York and Florida.

Dr. Frances G. Buchanan is spending the summer in her cottage at Glen Park.

Dr. V. D. McKelvey has been assigned to the duties of police surgeon in Denver.

Dr. Chas. A. Powers sailed for Europe on the Kronprinzessin Cecile, June 11.

Dr. and Mrs. W. M. Dexter have returned from a seven weeks' visit in the East.

Dr. N. K. Morris has returned to Denver, after a prolonged sojourn in California.

Dr. Carl W. Plumb of Grand Junction spent a few days in Denver last month.

Dr. L. A. Miller of Colorado City is the owner of a new five-passenger automobile.

Dr. and Mrs. Leonard Freeman recently visited the doctor's old home in Cincinnati.

Dr. R. G. Smith has opened an office at the corner of Broadway and 11th avenue.

Dr. Kearby, recently of Rocky Ford, is now conducting a pharmacy in Kansas City.

Dr. Harold T. Low of Pueblo was recently operated on successfully for appendicitis.

Dr. D. H. Coover has returned to Denver from a pleasant vacation on the Atlantic Coast.

Dr. F. E. Estes has been practicing successfully the past four months at Mercur, Utah.

Dr. and Mrs. H. G. Wetherill have returned after several weeks' visit in the East.

The new chief meat inspector of Denver, Dr. M. J. Warner, is a veterinary surgeon.

Dr. W. P. Hodnett of Oak Creek, Colo., was married to Miss Eleanor V. Finley, June 18th.

The family of Dr. John A. Jones of Boulder have arrived in that city to make their home.

Dr. E. R. Warner has returned to Denver from a voyage to China, Japan and the Philippines.

Dr. and Mrs. Charles Fox Gardiner of Colorado Springs are enjoying an outing in the East.

Dr. H. A. Black of Pueblo will spend a short vacation in Atlantic City and on the Maine Coast.

Dr. and Mrs. A. T. King of Pueblo are touring the Northwest and will probably visit Alaska.

Dr. P. D. Russell and family, of Pueblo, have gone to the Pacific Coast for two weeks' vacation.

Dr. T. M. Burns presided over the obstetric section of the A. M. A. at the Atlantic City sessions.

Dr. F. E. Neres made a flying trip to Pittsburg, New York City and other eastern points last month.

Dr. W. C. Abbott the tireless and invincible passed through Denver, early in July, on a business trip.

Dr. Oscar Hayes has been appointed assistant medical inspector of the Denver Health Department.

Dr. R. W. King, who recently graduated in medicine from the State University, will locate at Casper, Wyo.

We are pleased to note that Dr. Wm. C.

Mitchell has been reappointed city bacteriologist of Denver.

Dr. W. F. Follansbee, who spent the winter in California, will continue his stay through the summer.

Dr. F. P. Gengenbach, who has been confined to his bed, suffering from an injured knee, is up and about.

Dr. Benjamin M. Steinberg has been appointed one of the two county physicians under the new regime.

The University of Michigan has bestowed the degree of doctor of science upon Dr. Henry Sewall of Denver.

Dr. J. M. Perkins is planning to erect a bungalow and garage at the corner of 13th avenue and Clayton street.

Dr. Mary E. Bates has returned to her practice in Denver, after several months restful vacation in the East.

Dr. Grant S. Peck, after a "touch of pneumonia," has gone to Massachusetts to visit his mother and recuperate.

We understand that Dr. Louis Bernheim is about to undertake a prolonged course of post-graduate work in Europe.

Dr. James R. Arneill took a week off in the middle of June to attend his younger brother's wedding in California.

Dr. M. Ethel V. Fraser has the honor of being the first woman physician to serve as county physician of Denver.

Doctors D. F. Bice and Roy W. Johnson are the new internes at St. Mary's Hospital, Pueblo, for the coming year.

Dr. J. H. W. Meyer has been appointed assistant bacteriologist to Dr. Mitchell, and A. B. De La Vergne, second assistant.

Dr. Henry W. Hoagland attended the meeting of the American Climatological Society, held in Hartford, Conn., last month.

Dr. Nicholas Wood will take his three boys into the mountains in July and teach them how to carry a gun, make camp fires, etc.

Dr. H. A. Green, of the Boulder-Colorado Sanitarium, attended the recent meeting of the American Medical Association at Atlantic City.

The national convention of the American Institute of Homeopathy is billed for Denver next year. An attendance of about 2,000 is anticipated.

Dr. Ralph Bosworth was married to Miss

Annie E. Ford, the day following his graduation from the medical department of the State University.

Dr. M. R. Bowie of Somerset, Colo., sailed for Europe on the 12th inst. He will take a post course at the University of Edinburgh, Scotland.

Major Charles E. Locke and son, Dr. John Galen Locke, are at present in Vienna, having visited nearly all the other European clinics of note.

The corner stone of the \$5,000 solarium of the Jewish Consumptives' Relief Society at Lakewood, donated by the Ladies' Auxiliary, was laid on June 23d.

Dr. Elmer E. Bartelt and family have returned to their home in Lamar, after a month's rest in California. The doctor is somewhat improved in health.

Dr. M. Ethel V. Fraser was appointed by Mayor Arnold a delegate to attend the national charities convention, held at Cleveland the middle week of June.

Dr. Charles Powers was chosen president of the American Surgical Association, at the recent meeting in Toronto. This society has a membership of 150.

Under the new regime for Denver, the two milk inspectors (Dr. E. A. Grubb and Dr. P. C. Guyselman), are recent graduates from the State Agricultural College.

The Denver City and County Hospital has now a special nurse, whose time is devoted entirely to social service work, as is done in a number of the great eastern hospitals.

Dr. A. H. Williams and Dr. O. D. Wescott have been appointed to serve with Dr. J. M. Perkins as an advisory board in connection with the Denver City and County Hospital.

Dr. Samuel S. Hughes, of Pueblo, for many years a practicing physician in Pennsylvania, passed away, June 26th, at the age of 75.

According to the Medical World, graduates of medicine, on two years' additional study at the University of Wisconsin, may now try for the degree of "Doctor of Public Health."

Dr. George B. Crews, one of the oldest and best physicians of the North Side, has opened an office at 307 Central Savings Bank Building.

Dr. A. R. Kracaw, 533-534 Commonwealth Building, who has been resident anesthetist at St. Anthony's Hospital, announces that

he will limit his practice to the administration of anesthetics.

The Ephraim McDowell Medical Society, of Cincinnati, recently erected a monument to Dr. John Lambert Richmond, who did the first Caesarean section in America, at Newton, O., 85 years ago.

Dr. Daniel F. Richards, one of the leading practitioners of the South Side, was married to Miss Edith Booth early last month. The happy couple spent the month of June on a honeymoon trip.

Dr. John H. Miller of Littleton died of pneumonia, June 1, at the patriarchal age of 92. He was a graduate of Jefferson Medical College, and had practiced 58 years, retiring twelve years ago.

The new state home for the feeble minded at Arvada, was opened the first of July, under Dr. Busey's management. The institution will accommodate about 100 patients, each county being entitled to one patient, or one for every 10,000 population.

Dr. Gerald B. Webb has returned to Colorado Springs from Rome, whither he had gone as one of six delegates from the United States to the seventh annual congress of the International Association for the Study and Prevention of Tuberculosis.

General and Mrs. John Chase invited the members of the Denver Chapters of the Sons and Daughters of the American Revolution to participate in the annual picnic of the patriotic societies at their country place (Happy Hollow Ranch), near Sedalia, June 15th.

Dr. Herman E. Hayd, a leading surgeon of Buffalo, recently stopped over in Denver on his way home from California, to greet his old McGill classmate, Dr. Edmund J. A. Rogers. Dr. Hayd is an ex-president of the American Association of Obstetricians and Gynecologists.

At the annual election of the 20th Century Club, on the evening of June 12th, the following officers were elected for the ensuing year: President, Dr. W. S. Bogart; vice-president, Dr. Grant S. Peck; secretary, Dr. Carl G. Parsons; treasurer, Dr. A. H. Earley; custodian of specimens, Dr. Philip Hilkowitz.

At the forty-third annual meeting of the American Medical Editors' Association, held at Atlantic City, June 1st to 3rd, Dr. Thomas L. Stedman, editor of the Medical

Record of Dean of American medical editors, was chosen president. The efficient secretary, Dr. Joseph MacDonald, Jr., editor of American Journal of Surgery, was re-elected.

Dr. Howell T. Pershing has been chosen president, and Dr. George A. Moleen, secretary of the Neurologic Section of the A. M. A. Dr. Robert Levy is now chairman of the section on nose, throat and ear diseases. On motion of Dr. H. G. Wetherill, the "Section of Obstetrics and Gynecology" will hereafter be known as that on "Obstetrics, Gynecology and Abdominal Surgery."

The Colorado State Dental Association held its 26th annual convention at Manitou, the latter half of the fourth week of June, and will meet at the same place next year. The following officers were elected: President, Dr. H. W. Le Fevre, Denver; Vice President, Dr. E. Y. Wilson, Colorado Springs; Secretary, Dr. Charles Munroe, Boulder; Treasurer, Dr. Wm. Smedley, Denver. This is Dr. Smedley's 24th consecutive term as treasurer.

The attendance at the June meeting of the American Medical Association in Atlantic City was about 3,600, as compared with 6,000 at the last eastern meeting. The membership showed an increase of only 323 in spite of the faithful work of many agents, the "personal" circular letter of the editor of the J. A. M. A., etc. Can it be possible that the *hoi polloi* are growing weary of the Boss? It may be noted in passing that some 5,000 new men graduated into the practice of medicine in this country during the past year. Dr. Jacobi's presidential address (see Medical Record, June 8th), was full of wisdom, as might be expected from the Nestor of American medicine. Dr. John A. Witherpoon of Nashville is the new president of the association. The next meeting is to be in Minneapolis.

CLINICAL SOCIETY.

Of the New York Polyclinic Medical School and Hospital—Meeting of March 4, 1912.

Case of Foreign Body in the Eye—X-Ray Localization—General Infection of the Eye Controlled by Urotropin. Case presented by Dr. Earl Conner. The patient, a young man of 22, called upon Dr. Conner, with a history of being employed in hammering or

using a chisel on a piece of cold steel. A piece of the metal flew and struck him in the eye. When seen four days later, the eye was swollen and painful; the anterior chamber was filled with pus, and on the nasal side of the globe, there was a minute punctured wound, about 4 mm in size. The patient had not slept the night before. He was informed that the eye was infected and that in all probability would be lost, though every effort would be made to save it.

On admission to the hospital, the test was made with the Giant Magnet. The result, however, was neither positive or negative. If there is a foreign body in the eye it is apt to give pain on being brought into the field of the magnet. In this case, the temporal side of the eye was brought into the field of the magnet, and the patient experienced sharp pain, but after a dozen trials no foreign body could be located at any point. The patient was put to bed, given atropine, and hot applications of calomel.

The pupil was dilated and pus in the anterior chamber absorbed, and the interior of the eye examined. A yellow reflection was obtained, which was evidenced by infection of the vitreous. The inflammation increased from day to day, up to the tenth day, before it was possible to control it. After the patient was put to bed he was given calomel, followed later by seven and a half grains of urotropin three times a day for two weeks. This drug has been administered in a large number of cases of eye infection with very favorable results. Dr. Connor said that he had had three cases of eye infection in the past few weeks in which the infection had apparently been controlled by the use of Urotropin.

Skiaographs had been made of the eye for the purpose of determining the presence or absence of a foreign body. The size of the foreign body, as determined by the skia-graph, was 1mm by $1\frac{1}{2}$ mm.

As a rule these cases go on to the loss of the eye. An infection of the vitreous is seldom or never arrested. The usual termination is perforation of the eye and hemorrhage. The inflammation in this instance had been controlled, the pain relieved, the patient had perception of light, and there is hope of saving the eye.

Haematuria in a Multipara—Unknown Cause. Presented by Dr. Ward B. Hoag. Dr.

Hoag reported a case of haematuria in a multipara forty years of age, in her fourth pregnancy. At six and a half months she developed, without any discomfort, a considerable quantity of blood in the urine. Beyond the presence of blood there was no pain or discomfort of any kind.

The patient was put to bed, irrigations of alum solution used, and rest enjoined for ten days. It had no effect on the bleeding. She went on to full term and was delivered in a perfectly normal way. The hemorrhage continued for two weeks after the child was born, and then stopped as suddenly as it had begun. Dr. Hoag thought that it was the result of intra-abdominal pressure, perhaps the rupture of a small blood vessel. The same night there was a little fleshy plug passed in the urine, which was the only thing ever seen, and coincident with this the hemorrhage stopped and has not since returned.

Dr. Shears said that although the hemorrhage might be due to toxic conditions, in the present instance there were no signs of a toxemia: Ruling out local papilloma or a ureteritis, he thought that six and a half or seven months was not too early to exert pressure symptoms sufficiently severe to produce hemorrhage. From a careful examination of the bladder and the absence of stone or other aggravating cause, he should be inclined to attribute the bleeding to this cause.

A Case of Tubercular Peritonitis—Prolongation of Life by Intra-Abdominal Administration of Oxygen.

(By Dr. H. D. Meeker).

Dr. Meeker showed a case of tubercular peritonitis which he had treated by the intra-abdominal administration of oxygen. The case was apparently cured. He also advocated its use in cases of profound shock and ascites, and said that it required from 72 hours to four or five days for complete absorption. Care had to be exercised in watching cases, as the abdomen became flat in from 48 to 72 hours. Collapse from its complete absorption should be guarded against by the free administration of stimulants. Dr. Bainbridge said he had been using oxygen to meet shock in abdominal surgery for the past eight years, and had treated in all about one hundred cases. He had noted marked improvement and a ready response to its use.

Three Cases of Sterility Secondary to Adnexa Disease: Cured By Operation.—Presented by Dr. Henry V. Holcomb. These three cases were of interest as showing what could be accomplished by conservative work. The first case was a woman 19 years of age, who had had a previous miscarriage in the sixth week of pregnancy, and gave symptoms showing pelvic trouble. Operation by Dr. Child showed both ovaries bound down by adhesions, a cyst attached to the left tube, and the tubes closed. The cyst was evacuated, the adhesions broken down, and the tubes probed with a fine bougie their entire length. Convalescence was uneventful. Four months after the operation she was free from any abdominal symptoms; menstruation regular. She later showed symptoms of a floating right kidney, which was anchored by three silk stitches. Convalescence from this operation was also uneventful. February 2nd she had her last menstruation, and by the end of March she began to have morning vomiting with swelled breasts, and all the evidences of pregnancy. She had a precipitate delivery of a seven and a half months foetus, in the following August. The child died, but the mother is alive and well.

The second case was somewhat similar. The patient comes with all the abdominal symptoms of inflammation of the appendages. Dr. Child found on operation that both ovaries were prolapsed and bound down by adhesions, occluding the tubes. After her operation she returned home well. One month after the operation she became pregnant and was delivered of a full time child.

The third case was a woman of 31 years of age who had been sterile for thirteen years. She had a former child and was anxious to have another. She had pelvic pains bilaterally, painful and profuse menstruation, which had been present for the previous four years. Examination showed a retroverted uterus, and tender appendages. Local treatment gave no relief. Operation in 1909 by dilatation, curettage, followed by laparotomy, showed the same adhesions of ovaries, with closed fimbriated extremities, as in the other two cases. The same method of treatment was followed, and the patient made an uneventful recov-

ery. She gained in weight after the operation, and in the following November was delivered of a normal child.

None of the above three cases came to be operated upon for sterility, but Dr. Holcomb laid stress upon the desirable outcome of cases who have primarily adnexal trouble, and in the correction of this secured the desired pregnancy. Dr. Holcomb said that as far as could be ascertained these cases were free from gonorrhoea.

Dr. Child said that the cases reported were very interesting to those who were striving for the correction of sterility where the fertility of the husband was unquestioned. He had felt that it was important to thoroughly probe the tubes in these cases to insure an absolute patency. With the adhesions of the adnexa corrected, malpositions replaced, and the toilet of the uterus complete, he thought that there was a field of work open to the careful and discriminating surgeon, which would be effective in overcoming some hopeless cases of sterility.

Dr. Holcomb, in closing the discussion, said that the tubes were absolutely closed and the fimbria clubbed, so that in the ordinary course of events pregnancy would have been impossible.

Specimen of An Aborted Right Kidney With Greatly Enlarged Opposing Kidney Non-Functioning.—Presented by Dr. Chetwood. Dr. Chetwood illustrated the value of the colorimeter test in measuring the capacity of the kidney function. His patient on cystoscopic examination showed apparently normal ureteral orifices from both kidneys. The left ureter was easily catheterized, withdrawing urine of low specific gravity, deficient in urea, and a number of leucocytes; pus, though present, was in insignificant amounts. The right ureter was rigid and impossible to catheterize, and the cystoscope showed a certain amount of purulent granular material slowly exuding. The patient was then subjected to the colorimeter test, made by injecting 1 cc. of phenol-sulphone-phthalein, after having previously emptied the bladder. At one and four hour intervals the color was so low that the individual kidneys were tested separately, resulting in an absence of color on the right side and a very low color return on the left.

Operative treatment seemed necessary, and after taking X-ray pictures to rule out the possibility of a calculus, the patient was operated upon. Operation showed a vestiginary right kidney, with a ureter entering the bladder, but having a sacculated distal end. On the left side, which was unsuspected, there was a perfectly normal ureter below, while above was a large ureteral sac almost as large as the small intestine, which entered the kidney. A large peri-nephritic pus sac occupied one side of the kidney, and practically no kidney tissue remained even in this organ to secrete.

The patient could not possibly have lived, as proved by the colorimeter test, and subsequently verified by autopsy.

Dr. Sinclair said that in Dr. Chetwood's case there had been a slight previous injury many years ago, but aside from blood in the urine for a few days no recurrent symptoms of any kind had occurred.

Dr. Wyeth said a very interesting phase of the case was the extremely limited excretory area eliminating urea. Considering the good health the patient enjoyed, he thought the skin must have taken an important part in the excretion of urea.

FOREIGN JOURNALS

(Translations by Dr. Joseph Cuneo.)
 Denver, Colo.

The 7th Congress vs. Tuberculosis— Rome, Friday, April 19, 1912. Surgical and Orthopedic Treatment of Tuberculosis of the Bones and Joints. Menciaer de Reims protests against the unjustified abuse of the so-called "climatic" treatment. Tuberculosis of the bones and of the articulations is curable anywhere by any practitioner that will devote his time to it. The author says that the local treatment acquires an almost specific value. He insists on the value of the modifying agents, having iodoform as a base, on their local action on the seat of the lesions and on the modification of the general condition produced by the nascent iodine in contact with fats. The local treatment becomes also one of the best among the general treatments. Menciaer insists also on phenolisation in serious cases. It often obviates amputation, and it always cures without any shortening of the limbs. This feature is of such importance that it must not be neglected by those who have had experience with such cases, because the shortening of limbs and also the deplorable orthopedic results are avoided by this method of treatment.

General Anesthesia by Muscular Injections of Ether, by J. L. Faure.—The author says: "I have employed Carpentier's method in a woman affected with a tumor of the uvula and tonsil. The intra-muscular in-

jections of ether were not painful, I injected altogether 50 cubic centimeters. At the expiration of 20 minutes the patient was in a stuporous stage, and a few whiffs of chloroform were sufficient to produce complete anesthesia. The operation was easy, and the patient next day made the statement that she did not feel anything." (*Le Progres Medical*, Paris, May 4, 1912).

Suppurations of the Iliac Fossa of Prostatic Origin. (Galon, Thesis of Lyon, No. 44, 1911-1912)—The suppuration may take place in the sub-peritoneal cellular tissue, and this is the most frequent site; it can also localize in the fascia of the psoasiliac muscle. In the first case, the suppuration is formed at the expense of the external iliac ganglions. This is an adeno-iliac abscess. In the second case, it is still explainable as a lymphatic affection. It is a psoasitis by propagation. The symptoms are confused with the ones of the affections (adeno-iliac and psoasitis abscess).

The etiologic diagnosis is made by eliminating other possible causes of abscess at the level of the iliac fossa, particularly appendicitis, basing on the concomitant evolution of the prostatic lesions. It is almost clinically impossible to eliminate the perinephritic abscess. The treatment must consist in the early and free destruction of the diseased tissues. (*Le Progres Medical*, Paris, April 27, 1912).

BOOKS

Microscopy, Bacteriology and Human Parasitology. A Manual for Students and Practitioners, by A. E. Achinard, A. M., M. D. 267 pages, cloth. Price \$1.00. Published by Lea and Febiger, Philadelphia and New York.

This is a very clear, concise and practical little work and contains an immense amount of information that the busy physician needs in his daily work. It is right down to the minute, and the technic for bacteriologic examinations is up to date and satisfactory.

E. STUVER.

Surgical Operations. A Hand-book for Students and Practitioners, by Prof. Friedrich Pels-Leusden, Chief Surgeon to the University Surgical Clinic, and Chief of the University Surgical Polyclinic in the Royal Charity Hospital of Berlin. English Translation by Faxton E. Gardner, M. D., of New York. Six Hundred and Sixty-eight Illustrations. Published by Rebman Company, New York.

This book links together the practical and theoretical teaching of the author. It is concise, yet thorough. Special attention is given to post-operative treatment, particularly after operations upon the thoracic and abdominal cavities. The illustrations, with comparatively few exceptions, duly accredited, are original. Most of them are said to have been drawn from personal specimens, notwithstanding it is candidly mentioned in preface: Many difficult and complicated operative techniques remain without graphic figuration within the scope of the work, regarded unessential. The index is comprehensive, and withal the work is excellent and highly commendable.

G. W. M.

Thornton's Pocket Medical Formulary. By E. Quin Thornton, M. D., Assistant Professor of Matvia Medica in the Jefferson Medical College, Philadelphia. Published by Lea & Febiger, Philadelphia and New York. Tenth Edition.

New discoveries with a constant progress in medical therapy make it necessary to frequently revise all writings applying to this science. The author does not design to displace the individual thought of the practitioner, whose diagnosis and conditions of his case must govern the character and quantity of medicines used. The arrangement of the work is planned for con-

venience and ready reference. Diseases are arranged alphabetically. Under each are given what are believed to be the best in the different conditions, stages and complications. We have used the former editions and find them convenient and useful.

E. L.

New and Non-Official Remedies. Price, Cloth, \$0.50; Paper, \$0.25; Pp. 298. Chicago: American Medical Association, 1912.

This book contains descriptions and a statement of the actions and uses of all articles which have been examined and accepted by the Council on Pharmacy and Chemistry prior to January 1, 1912, for inclusion in the list of New and Non-official Remedies. It contains much useful matter concerning the composition and properties of those products which have been accepted by the Council.

Augustus Charles Bernays. A Memoir by Thekla Bernays. Price, \$2.00. St. Louis: C. V. Mosby Company, 1912.

This memoir of the late brilliant and lovable Bernays was written by his unmarried sister and constant companion. She has made a very readable book of her subject—one giving inspiration as well as entertainment. Geheimrat Max Fuerbringer, professor of anatomy at the University of Heidelberg, has contributed one chapter in the form of a literary tribute to the friend of his youth. Dr. G. G. Cottan, of Sioux Falls, So. Dak., arranged the bibliography of Dr. Bernays' contributions to medical and surgical literature. The last and greatest of these contributions is the book entitled "Golden Rules of Surgery," published by the C. V. Mosby Company. The text is well printed on good paper, and is adorned with three photogravures of Dr. Bernays.

"Obscene" Literature and Constitutional Law. A Forensic Defense of Freedom of the Press. By Theodore Schroeder, Legal Counsellor to the Medico-Legal Society of New York. Privately printed for forensic uses. New York: 1911.

John Milton wrote his "Areopagitica" against the infamous Licensing Act of England, which provided that "no person whatever should presume to send by the post, carriers or otherwise, or endeavor to dis-

pense, any unlicensed book," etc., on penalty of forfeiture, fine and imprisonment. If Milton were living today, he would have still more reason to complain of what our author terms the arbitrary will of a lawless judiciary. "This lawless judiciary in the matter of obscenity has legislated into existence criteria of guilt so contradictory as to be meaningless, so inclusive as to make everyone a criminal, and, when applied to all conceivable cases, so fantastic in their result as to make our courts a laughing stock of the alienist." For example, the Bible, on which it was formerly the custom to swear witnesses, has been judicially declared obscene. Among a great number of quotations with which the author supports his contentions, we note the following from Prof. Andrew D. White: "At a time when eminent prelates of the Older Church were eulogizing debauched princes like Louis XV and using the unspeakably obscene casuistry of the Jesuit Sanchez in the education of the priesthood as to relations of men and women, the modesty of the church authorities was so shocked by Linnaeus' proof of a sexual system in plants, that for many years his writings were prohibited in the Papal States and in various parts of Europe, where clerical authority was strong enough to resist the new scientific current." As Max Mueller has said, "The truth is always safe, and nothing else is safe." The sane, scientific presentation of the sexual life to the children in our public schools would do much, we believe, to forestall immorality. The keen and scholarly author of "Obscene Literature and Constitutional Law" has done well his part in leading humanity out of darkness into light.

E. C. H.

The Medical Epitome Series: Physiology, a Manual for Students and Practitioners. By A. E. Guenther, Ph.D., Professor of Physiology in the University of Nebraska, and Theodore C. Guenther, M. D., Attending Physician, Norwegian Hospital, and Visiting Physician, Tuberculosis Clinic of the Bay Ridge Hospital, Brooklyn, N. Y. Second Edition. Thoroughly Revised. Cloth, \$1.00, net. Illustrated. Lea & Febiger, Philadelphia and New York.

This manual of physiology combines many admirable qualities with its brevity. It is designed to cover the subject as completely as compactness will allow; is re-

vised thoroughly and well illustrated. Most pleasing of all perhaps is the excellent manner in which the subject is presented. The text is clear and concise, and yet is not a mere compilation of facts which jar by their abruptness, but reads smoothly from one point to another, as might a larger work. The questions with each chapter are thoroughly practical.

LOVE.

Text Book of Ophthalmology in the Form of Clinical Lectures. By Dr. Paul Roemer, Professor of Ophthalmology at Greifswald. Translated by Dr. M. L. Foster, New York. With one hundred and eighty-six illustrations in the text and thirteen colored plates. Published by Rebman Company, New York.

This most excellent work should hardly be dignified by the title of a "text book of ophthalmology," since its contents are confined to examination of the anterior segment of the eye, diseases of the conjunctiva and cornea, diseases of the iris, and diseases of the lens. The thorough manner, however, in which each of these subjects is treated demands that it should take a high place in ophthalmic literature. It illustrates how thorough is the German student as a teacher. The arrangement of the book is in the form of lectures, and while it loses somewhat because of the reader not being able to see the clinical cases presented in illustration, yet it is made up for by the fascinating manner in which the author handles his subject. His manner of expression is so simple and plain and yet so highly scientific, with every up-to-date method set forth, that it is impossible to put the book aside until it is read from cover to cover. We have known the translator for many years and take pleasure in complimenting him upon his splendid translation of the German text. It is a book that will help every one who reads it, and we bespeak for it the appreciation which it deserves.

M. B.

Massage and the Original Swedish Movements. Their Application to Various Diseases of the Body. By Kurre W. Ostrom, from the Royal University of Upsala, Sweden. Seventh edition, revised and enlarged, with 115 illustrations. Price, \$1.00. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1912.

This book consists of lectures delivered before the training schools for nurses con-

nected with the hospital of the University of Pennsylvania, German Hospital, Woman's Hospital, etc., and is the standard guide in this country in such matters. Each procedure is succinctly described, usually along with a picture in the text. The section on the application of massage and the Swedish movements to the various diseases of the body is of special value to medical practitioners.

The Surgical Clinics of John B. Murphy, M. D., at Mercy Hospital, Chicago. Vol. I. No. II. Octavo of 91 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1912. Publish Bi-Monthly. Price per year: Paper, \$8.00; Cloth, \$12.00.

The second number of the Surgical Clinics of John B. Murphy contains much very valuable material in regard to some of the bad results following fractures. His instructions about the treatment of compound fractures are as follows:

Never wash, scrub, handle, or touch the lacerated surfaces, either of bone or soft parts. In preparing the surrounding field, which is the first thing that should be done, soak the entire field with the hair on with ordinary tincture of iodine. * * * Then freshen the surfaces of the wound with scissors and forceps. If a sequestrum is separated and loose, pick it out with an instrument; otherwise do nothing. If the periosteum is attached to the sequestrum, permit the sequestrum to stay. Next freshen the surfaces of the skin and make them clean-cut where they are contused, so as to get an accurate apposition of the cut skin-edges with horsehair, and with here and there a tension suture of silkworm-gut, if necessary. Finally, dress the limb with a large dressing, capable of absorbing the oozing from the ends of the bone and from the lacerated tissue, and maintain them sterile if the dressing takes up the secretions; the best of all preparations that we have had for that purpose is the 5 per cent moist carbolic gauze—to prevent decomposition. Having converted a compound fracture by this method into a simple fracture, you are ready for the process of repair of a simple fracture. Never wire a compound

fracture. Never plate a compound fracture. Never put in a foreign body in a case of compound fracture. * * * In over thirty years the number that have healed in, put in there primarily in compound fractures, in my observation in that great period of time can be counted on the fingers of one hand.

Volkman's Contracture: The lesion is a surgeon's lesion, and never a lesion due to the trauma. It is due to a defective dressing. A firm binder to try to force the bones in position is a mistake. It is most commonly associated with fractures of the elbow; second, with fractures of the forearm; and, third, with fractures of the upper arm. The excessive pressure produced by the bandage during the stage of acute edema and swelling following the trauma produces a myositis, and it is one of quick formation.

The above extracts from the text show the clear, concise way the facts are stated. This number is full of just such good reading.

The table of contents reads as follows:

1. Ununited Fracture of the Tibia (Transplantation of Bone).
2. Charcot's Ankle-Joint.
3. Ununited Fracture of the Neck of the Femur.
4. Arthritis of the Knee-Joint.
5. Ununited Fracture of the Humerus (Transplantation of Bone).
6. Ankylosis of the Knee—Arthroplasty.
7. Volkman's Contracture.
8. Ankylosis of the Hip—Arthroplasty.
9. Pelvic Tumor.
10. Lengthening of the Tendo Achillis.
11. Inoperable Sarcoma of the Face; Salvarsan.
12. Cutaneous Syphilis; Salvarsan.
13. Gastric Ulcer; Secondary Operation.
14. Prolapsus Recti.
15. Exploratory Laparotomy, Appendectomy, Megaduodenum.
16. Plastic Operation on the Face.
17. Cyst in the Left Iliac Fossa.
18. Trauma of Cystadenoma of the Breast.
19. Anastomosis of the External Popliteal Nerve.

F. C. B.

UTAH SECTION

Denver Medical Times and Utah Medical Journal

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Editor

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THE SMOOT AND OWEN PUBLIC HEALTH BILLS.

We take pleasure in publishing Senator Smoot's reply acknowledging receipt of the Resolutions adopted by the Davis County Medical Society, as printed in our June issue. This reply shows the necessity for united action by the profession at large.

Would it not be possible to call a conjoint meeting of the Homeopathic, Eclectic, Osteopathic and so-called Allopathic Societies in each State? Why should not our State Councilors take the matter up and refute the allegations made against the regular practitioners of medicine. We and a few of the public know that they are untrue. Let the profession of healing get together and stay together in this matter at least. The various sectarian churches manage to unite in the face of a common enemy. Why should not the professors of the Healing Art do the same?

UNITED STATES SENATE,

Committee on Public Lands (Reed Smoot, Chairman).

Washington, D. C., June 11th, 1912.

Dr. Frederic Clift, Secretary,
Davis County Medical Society,
Layton, Utah.

My dear Doctor:

I desire to acknowledge the receipt of your letter of June 3rd, 1912, enclosing resolutions adopted by the Davis County Medical Society favoring the passage of the Owen bill and requesting me to withdraw my amendments by way of a substitute bill. The Owen bill has been changed so many times that I doubt whether you really know what it contains. In order that you may know, I enclose you herewith a copy of the same.

I also enclose you a copy of the bill introduced by myself on May 11th, to establish a public health service. My bill seeks to consolidate all of the health agencies of the Government into a public health service. I am positive that it will accomplish all that the Owen bill will accomplish, and it eliminates the objectionable features of the Owen bill. I shall try to substitute my bill for the Owen bill if I can get consideration of the Owen bill at this session of Congress. There has been such a protest against the Owen bill that the Senator has asked that it go over until next year. However, the necessity for a change in the present conditions is such that, in my opinion, action should be taken at an early date.

The bubonic plague in San Francisco was completely eradicated by the Public Health and Marine-Hospital Service. I have received letters and telegrams from all over the country claiming that the Owen bill is a gigantic move on the part of organized allopathic physicians to gain control of medical legislation, and would tend to curb the medical freedom the constitution grants, and that it would mean the expenditure of large sums in maintenance which would come out of the taxpayers' pockets. I do not believe it, nor do I believe that patent-medicine men are at the bottom of the opposition. I have not had one patent-medicine man call on me.

The Secretary of the Treasury and many of the leading doctors of the country approve of my bill. I sincerely trust that after you have examined the same, you will do the same.

Yours sincerely,

REED SMOOT.

GOOD DRUGS.

Today we hear much relative to pure and good food, and the maker of food products, if he would be successful, must, per force, place upon the market only such articles as come up to the established standard. Not only must his food be of good quality, but he must not add chemical preservatives thereto which will be deleterious to the user thereof. This is as it should be:

The manufacturer of drugs should be placed under the same ban, and he is to a certain extent. Those who manufacture drugs for the use of the doctor, in order that they may protect their own interests, are endeavoring to make their goods as nearly standard, as is possible. The facts of the matter are, that the major portion of the larger manufacturers are standardizing every bit of their goods, in which there is a possibility of such standardization. In some instances, despite the care upon the part of the manufacturers, many of these drugs, through deterioration, due to climatic conditions, evaporation, age, or improper handling, fail of the standard after being kept by the retail druggist or doctor for a time. This is not the fault of the maker, but of the form in which the drugs are manufactured. There are many drug agents which are not standardized, but which are made as nearly perfect as is possible, under the conditions of manufacture. As there is no means whereby such articles may be standardized, they must be accepted according to their therapeutic activity, and rejected when they become inactive. Like the standardized goods, they may deteriorate for the same reason as has been cited above.

Much has been said regarding the so-called proprietary drugs, both for and against them. It is probably true that many of this class of goods may be worthless, but on the other hand

there are many which are to be classed with good drugs and used accordingly. Many of these articles, like the standardized goods, are liable of deterioration, and consequently are open to the same general fault as is found with all drugs susceptible to change. As a rule, the proprietary products are extremely high class, in so far as manufacture is concerned, as it behooves the makers thereof to make them just a bit better than any other goods made. In consequence of this, we find that many of this class of goods show less deterioration than do others which do not rank in the class of specialties. Much fault has been found with some of the proprietaries, because of the fact that the manufacturers have made vast claims regarding their virtues. It may be true, and undoubtedly is, that many of such products are practically worthless, or do not have the numerous virtues claimed, but it stands to reason that all of them have more or less worth, else they would not remain upon the market year after year, and frequently with increased sale.

Both the regular line of drugs and good proprietaries have their place in medicine and should be given such place without question, only as to therapeutic activity, which is the matter of paramount importance to the doctor; in fact all that he is looking for.

There is, however, a class of drug products upon the market with which we could all do well without. They are the so-called patent medicines. All such products are manufactured secretly and their constitution is likewise a matter of secrecy, in so far as the major portion of their contents is concerned. It is true that the makers of such products are obliged to note the amount of certain ingredients, but not of others. Many of these makers of such products, prior to 1906, claimed that their medicines were harmless, but thereafter were obliged to admit

that they contained opium, alcohol and other harmful agents. Many of the patent medicines carry **much more alcohol** than do the **lighter wines**, the dose of the former, in many instances being approximately the same as a draught of the latter. In many cases all of the results obtainable were due almost wholly to the alcohol content. In spite of the fact that these goods are labeled showing their alcoholic content, they are still used, and not infrequently by many who would decry the use of alcohol in the form of a light wine or beer. Many of the patents, employed as antispasmodics, carry opium in considerable quantity. This has been found true in numerous soothing syrups, and it is an unknown fact as to how many innocent babes have been poisoned to death through the use of such agents. Nor have we any means of knowing how many have been started toward the drunkard's grave through the use of the high percentage alcohol products of this sort. Many of the patent cures for morphine and other habits have been found to carry that, or other drug, in considerable quantity, and instead of bringing about a correction of the habit, have frequently increased the dose of the drug.

It has been thought that legislation would overcome the difficulties associated with the manufacture of foods and drugs, but this has been tried and found wanting, largely because of the fact that many of those who should administer and execute the laws have, seemingly, been in league with the makers of inferior products of both sorts. We will not say that the supposed executors of the laws have received substantial inducements to withhold attacks upon inferior products, but it would look that way. It would seem that an honest man finds it impossible to remain long with the administrative department having to do

with the matter of pure foods and drugs, especially after such goods have been investigated, and found wanting, either as to purity or quality. It is, as it always has been, a matter of profit to the manufacturer, and if it is possible for him to market **inferior** goods for the same price as might obtain for those of a superior nature, he is going to continue so doing for all time to come. It is this class of manufacturers who would interfere, **and who do interfere** with the enforcement of laws which insist that all foods and drugs must be absolutely pure and to consist of that which they are supposed to contain.

Politics enter too largely into the enforcement of pure drug laws, as they do into all things which interfere with the interests of inferior manufacturers. A remedy for this is to take the matter of execution and administration of all such laws out of political hands completely and place them in the hands of those who are not only equipped to ascertain what foods and drugs are good, and which are bad, but who will fearlessly see to it that the laws are enforced. Not only should the head of such a department be chosen because of his individual worth, but everyone connected therewith should be employed for like reasons. In other words a man of known worth in this direction should be **hired** to do a certain line of work, and if found wanting in this particular, should be discharged. Party politics should not enter into the question at all and a good man should be retained in office as long as his work remained as it should be, of high class, no matter what changes might be made in other departments of the Government. The investigator of food and drug products should be retained, as is an officer in the army, because of his knowledge of the subject in hand and

his ability to do things, and do them properly.

We find, upon investigation, that the trees of the forest and the hogs of the field are of vastly more importance in the eyes of the average politician, than are the lives of humans, and while there is every endeavor made to conserve the forests and hogs, the human is given but secondary consideration, as regards either the food he eats or the drugs he is obliged to take if he becomes ill. No effort is made to conserve the life of the babe through the prohibition of manufacture of the dope laden soothing syrups, nor are the grownups protected in like manner from the insidious patent medicines containing alcohol, or other harmful drugs. Man is supposed to take care of himself, and if he cannot, why let him die, seems to be idea of those who would protect those who would make and market inferior goods, both drugs and foods.

It is time that the people at large should take the matters of this sort in their own hands and insist that laws be made which will correct the existing evils and to see that there is no subsequent occurrence of such conditions. Let every man sent to a legislative body, be it State or National, be advised that he must see that laws providing for the manufacture of pure and good foods and drugs, be passed and that they be placed in the proper hands for execution, else such legislators be subject to recall, immediately they vote against such measure, and further that the people see that such measures be carried out to the latter.

If all the impure drugs were wiped off the market and the people were unable to self-medicate themselves, there would be a vast conservation of the health of the human race and the percentage of mortality would be lowered amazingly. Not only does this apply to impure drugs, but to those se-

cret nostrums, the patents, which have undoubtedly done much more harm than they have ever done good. Wipe out everything of this sort, regardless of the fact that it may force many manufacturers into other lines of work and the Nation will be better off, both physically and financially. Let the medical societies, National, State, District and County, all over the land get busy and educate the people upon this subject, and let the latter insist that their legislators likewise get busy and clean house from cellar to garret. Let there be no more resignations of men like Wiley.

SERVICES.

SHALL THE LABORATORY PREVAIL?

This is the day of exactness in all things, and more particularly in things medical. It is well that this is so, but it is possible that, in determining the absolute exactness of things medical not enough details are taken into consideration. We are told that we must not, or must, employ certain things. If we must not, it is because the articles in question have not conformed to certain laboratory standards. The same is true of those things which we may employ, excepting that they have conformed to the standards. These men of the laboratory give but little attention to things clinical. They base their opinions either upon chemical tests or the actions of the different agents upon **healthy animals**, but, as a rule, do not apply the agents to sick humans. In consequence of this, it is probable that many good things are thrown out, which would otherwise be adopted. In order to determine the purity of a drug, or combination of drugs, the laboratory has its uses. To determine the worth of a drug from a therapeutic standpoint, other than to determine whether it may be constituted in an active manner, should not be within

hands of the chemist or physiologist, that is wholly. He is not, in the vast majority of instances a clinician, if even a physician, and it is barely possible that he would not recognize the clinical effect of a drug, or other remedial agent, if brought in contact therewith.

A drug, or other remedial agent, is placed within the hands of the laboratory expert for report. He proceeds to tear it to pieces, telling us how much solids it contains, how much water and how much ash, or how much of any other constituent it is suspected it may contain. The chemist then turns the agent over to the physiologist, who proceeds to make certain experiments upon frogs, guinea pigs, rabbits, dogs and other **healthy animals**. Such experiments, in both instances, are made according to a certain set of practically invariable rules. Based upon the findings of these men a report, either for or against, is made upon the product under observation. If the agent fails to come up to the standard of either the chemist or physiologist, it is suggested that it be rejected. No cognizance is taken, as a rule, of the clinical effect of the remedy considered.

In so far as we know, **no physiologic laboratory has a "clinical" in connection therewith**. If such is the case, **are the findings of such institutions of absolute value?** We believe not. **They surely are not, if the findings of the clinicians are of any possible worth**. The past decade has seen much laboratory work done and many, seemingly active agents thrown out. That is, they are seemingly active, providing the clinician's observations have not been worthless. Many agents particularly drugs of plant origin, **have been classed as worthless because they have not shown reactions upon healthy animals**. Despite the fact that the laboratories have taken such action, the clinicians have continued

their use, for the simple reason that results have been obtained when the same agents have been employed in the treatment of the sick humans.

It is possible that many agents have been disregarded by the laboratory for other reasons. It has been suggested that such is the case, and if this is true it lowers the value of chemist and physiologist to a very marked extent. Only recently was a laboratory investigation made of a certain combination of drugs for the relief of a certain class of skin diseases. This agent was placed in the hands of a physician for investigation, and it was presumed that he would submit it to both laboratory and clinical tests. He disregarded the latter entirely and based his report upon the fact that he had found a certain ingredient in the combination which **he** did not consider proper. All of this, in spite of the fact that other, and as eminent, dermatologists had reported favorably upon the remedy, basing their reports upon clinical findings. Here the laboratory endeavored to rule, and rule it did for the time being.

The medical profession of this country, to a very considerable extent, resemble a band of sheep. The laboratory experimenter is the bell wether, and if he makes a move in a certain direction, the doctors follow him, regardless of the fact that he may be simply a chemist and practically without knowledge of the clinical application of the drug, or other agent, under consideration. Based upon his findings these doctors proceed to condemn a drug, frequently without giving it farther consideration, and in the face of the fact that it is possible that many experiments had been made outside of the laboratory, and clinically, which showed the agent to be of more or less worth. On the other hand, some of the drugs, or other remedial agents, which have been pronounced of worth by the laboratory, have subsequently found to

be wanting, in one way or another when employed at the bedside. A much talked of remedy, recently introduced, was supposed to be an absolute panacea in certain conditions and was passed by the laboratories. It was not without worth, and great worth at that, but it did not do all that either the manufacturer or experimentors claimed it would. It failed of absolute curative effects in the hands of the clinician.

The chemist has a certain sample handed him for assay or analysis and at that time finds that it fails of meeting the standard. Later another sample of the same identical product is handed in for like attention and the same chemist gives it his approval. Why is this? Is it possible that there are other reasons than the findings of the laboratory for the disapproval of an agent? It surely looks that way.

Two samples, practically the same in composition are handed in for examination. One is made extemporaneously, while the other is the product of a careful manufacturer. The latter may make some claims for his product which may be slightly far fetched. His product is thrown out mainly because of such claims, while the extemporaneous mixture is approved. This happened in a certain combination which has been submitted for approval time after time and which is called a nostrum, despite the fact that there is nothing secret about it, either as to process of manufacture, or composition. The laboratory suggests the use of the extemporaneous mixture, despite the fact that the other has been pronounced dangerous of application. Herein it is seen that, for one reason or another, the laboratory is not consistent. Is it possible that anything of a personal nature enters into such matters? Is it possible that any spirit of jealousy or revenge may linger in our physiologic laboratories? If such is the case the laboratory should be

wholly disregarded as a thing unworthy the trust of the physician.

Are the ultimate results any better than they were prior to the institution of the censoring laboratory? Do the physicians vary from their old routine because of the findings of such institution? In many instances the findings and reports of the laboratories are given considerable attention, but it has not been seen that the men giving such attention are more successful than are those who give more attention to their own clinical findings and base their treatment of cases upon the latter almost, if not quite, wholly.

The investigating laboratory has been found to disapprove of certain things simply because of the fact that such articles have become public property and are in the hands of the layman. Is that any reason why a thing of value should be disregarded? Quinine has been employed, almost from the time of its discovery, by the layman, but it is not condemned. It is said that it is a simple chemical and that it is impossible to condemn it. However, on the other hand, the reliable product of a careful manufacturer falls into the hands of the layman and is immediately condemned, because of such fact. It is to be deplored that any drug is employed by the layman for self medication, but why not condemn one as well as the other when the reason is the same in both cases. In the vast majority of instances the medical profession itself is to be blamed for the general use of any drug. The doctor lays great stress upon the value of a certain agent in certain condition and later on the layman goes to the druggist, instead of the doctor, gets his medicine and treats himself. Eventually the doctor discovers the condition of affairs and carries his plea to the experimental laboratory and this product is forthwith brought forward for farther examination. In some instances fault is found with the

product itself, in others the maker is accused of the ways of the faker, while in others fault is found with the package. In many instances it is simply taken into the laboratory and disappeared, without any semblance of an examination of the product itself.

Censorship is an admirable thing, if it be honest. The laboratory would likewise be a good thing, were it invariably honest. The laboratory may be absolutely honest, in so far as it goes, but it does not progress sufficiently to take into consideration every point. In consequence of this, despite the fact that the report may carry the truth in so far as the chemist or physiologist may know from the findings, any approval or disapproval might be far from the truth, and were the physician to follow the report to the letter, it is very possible that he might err.

The laboratory, in which drugs and other remedial agents may be carefully examined, is undoubtedly a valuable adjunct to medicine, but in every instance the agent examined should be submitted to a careful clinical test before a report is made, conclusively. No physiologic laboratory should be in operation other than in connection with a hospital. The latter should be of sufficient number of beds to warrant that the agent under consideration should be tested in more than one case. In fact, the complete report should be based, to a considerable extent upon the report of the clinicians, rather than upon that of the chemist or physiologist. It is in **pathologic conditions that drugs are employed**, and tests relative to their therapeutic reliability should be based upon applications under such conditions. Let the chemist and physiologist tell us whether or not the drug is pure, or physiologically active, and let their opinions go no farther, excepting as they may be cited in conjunction with the clinician in the last and final report. In that way will the profession

be given a fair report, and in no other. **We must not let the laboratory prevail**, if we would be successful practitioners.

SERVOSS.

THE UNITED STATES SENATE AND THE TALE OF TWO DISASTERS.

The Titanic went down with sixteen hundred souls on board. Its loss represented millions upon millions of wealth. The world now knows that it was a case of recklessness, a sacrifice to preventable causes. It was the greatest single marine disaster in history. The world was shocked. Rulers telegraphed words of condolence to each other. The United States Senate properly and promptly appointed an investigation committee that hastened with all speed to beat the survivors to port. Senatorial brows were thoughtful and senatorial pens were busy to formulate legislation designed to prevent recurrence of the calamity. Senator Raynor and others anathematized the steamship company and its managers. Others did the same. A common human impulse has ratified the celerity and purpose of all this present activity at Washington.

But suppose that during the last twelve months not only the Titanic, but four hundred Titanics, each carrying 1,500 persons, had gone to the bottom of the sea. Or suppose that every craft of every class belonging to the United States Navy, with every officer and man on board, had been lost during the last year. Then suppose that that accident had happened, not once but ten times over during that same period. Suppose that all that great loss—either four hundred Titanics or ten United States navies—had been the result of entirely preventable causes. Is it conceivable that under such circumstances Senator Raynor and other Senators would have arisen in their places to make some observations on the occurrence? Would a committee on investigation have been appointed, a bill drafted and legislation enacted in something less than four years? Yet Senator Raynor and his colleagues have been guilty of precisely such indifference and such negligence in the presence of an annual disaster that, in loss of life and treasure, is the equivalent of the loss of four hundred Titanics or ten United States navies.

They cannot plead ignorance of the facts. By their own act, by the act of Congress, a bureau of government was created that has furnished information to both branches of that body to the effect that over 60,000 die every year from preventable diseases. Statisticians and economists estimate the monetary loss thus incurred at more than two billion dollars annually. The whole disaster, including deaths and loss of money, is due to somebody's carelessness. The United States Government is not doing its duty in the premises. The Owen bill, to rectify this situation, was introduced in the Senate four years ago. Senator Raynor and his colleagues have permitted it to slumber in committee during all of that time, while, so far as the loss of life and treasure were concerned. Titanics have been going down at the rate of more than one a day. And now, within the last few weeks, when a play is to be made to catch every possible vote at the coming election, the committee of the Senate insults the intelligence and humanity of the country by reporting out a puny and emasculated measure.

The Committee on Public Health and National Quarantine, that has been responsible for this disgraceful delay and that is now responsible for this equally disgraceful report, consists of Senators Thomas S. Martin, Virginia, chairman; Samuel D. Mc-

Enery, Louisiana; Charles A. Culberson, Texas; Duncan N. Fletcher, Florida; Henry A. Dupont, Delaware; Jonathan Bourne, Jr., Oregon; Reed Smoot, Utah; Joseph L. Bristow, Kansas; Coe L. Crawford, South Dakota. The names are given because the time has come when men guilty of such derelictions are to be held politically responsible to their constituents, as they ought to be held personally responsible to the sorrowing but bereaved friends of their victims. We ask every physician in Virginia, Louisiana, Texas, Florida, Delaware, Utah, Kansas and South Dakota to bring these facts and their significance to the attention of his patrons, and especially the attention of every person who directly or indirectly has been victimized by preventable diseases. The physicians and electors of Oregon have attended to the matter of Jonathan Bourne, Jr., whom they have elected to stay at home.

Senator Raynor is right. Investigate the steamship company and its officials for criminal carelessness. The people, too, are right. Investigate Senator Raynor and his colleagues. Investigate him and his colleagues for equally culpable neglect in the presence of even greater disaster. Let there be no doubt but that the people will do this very thing, and do it promptly.—
Editorial Lancet-Clinic.

C. A. L. REED.

POSTURE AND NUMBER OF DAY OF THE LYING-IN*

GEORGE CLARK MOSHER, M. D.

Kansas City, Mo.

The striking variation in method of posture of the puerperal patients which I have observed in cases seen in consultation practice indicated to me that this is a subject still unsettled. So essential in its results to the future health of the woman, it has not even received the attention to which it is entitled. Frequently specific instruction is not given by the attendant, but the management of the case is allowed to go by default.

This led to an investigation, undertaken for the purpose of obtaining a consensus of the best scientific opinion as to the posture of the lying-in woman which revealed a wide difference in the teaching practice in this

country and the methods at present advocated by some German obstetricians.

It has seemed to me of value to present a synopsis of the various dicta, which have been pronounced on the general conduct of the puerperium throughout the obstetrical world. I do this in the hope that a comparison of authoritative expressions may be helpful in determining the care to be given the lying-in woman at a most critical period, days immediately following her delivery.

These German authorities differ radically from our teachers in advocating most heroic treatment and assure us that those women who are kept but three or four days in the horizontal decubitus fare better

*We desire to call the attention of those interested in Obstetrics to a very useful and instructive paper by George Clark Mosher, M. D., under the title of Posture of the Lying-in.

than those who are longer in bed, a view not new, however, since Dr. White, 130 years ago, advanced the idea of having patients on their feet the day succeeding delivery. The following brief review may indicate the attitude of some of our German confreres toward this most important subject.

Von Alvensleben in Zent, fur Gyn., September 5, 1908, gives the arguments for early rising of puerperal subjects, analyzing the reports of the Clinic at Kiel, where the patients were allowed to be on their feet from the first to the fourth day in normal cases. In his 100 observed women, the primiparae were allowed to be up the first day for an hour; finding in these that the functions of appetite, bowels and bladder all showed improvement over the average, where the customary nine days in bed were required, subsequently cases of multiparae were allowed the same privilege. Severe hemorrhage was not considered a contraindication of the permission. The only class not included were those in which grave operations in delivery resulted in deep lacerations of the soft structures or in cases of severe infection. The woman who was strong and healthy was required to take gymnastic exercise in bed daily. In addition the first day she was required to take a few steps to a chair, sitting up an hour. The second day she walked once up and down the room. The third day this was repeated twice, and on the fifth day, she would be allowed to be up six hours, lying down three hours after dinner. When out of bed a firm abdominal binder was worn. Of 100 cases, three were up on the first day, 61 on the second, 19 on the third, 18 on the fourth day. Of these 43 were primiparae, and 57 multiparae. In 90 cases no untoward symptom was observed; 6 patients returned to bed on account of irregular pulse, dizziness, faintness, weakness, or bloody lochia. Ten patients had fever which was attributed to the large percentage of gonorrhea in the clinic. In 7 cases, the lochia was fetid, 2 had cystitis, and there were two cases of slight mastitis. On the fourth day, the lochia was white—on the tenth, the lochia had disappeared. The muscles of the abdomen had good tonus, and the introitus had closed on the tenth day. In 9 cases (11 per cent) marked prolapsus was found, in 10 there was marked ante flexion, and in 6 retro flexion. The catheter was never required. Bowel movements were voluntary.

*Read before the Kansas City Academy of Medicine and reprinted from the Medical Herald, April 1912.

Wilhelm Rosenfeld (Gyn. Rundschau H. 11, 1908) argues on the same line, that the routine position during the lying-in period of nine days, the patient being kept on her back is a cause for retro-deviation. He quotes gynecologists who have their patients up in three hours to urinate, the ob-

stetricians who have their patients taking special gymnastic exercises beginning the third day, including movements of the abdominal muscles, and sphincters of anus, and vulva, mornings and evenings. In patients with no temperature, the upright posture is permitted the third day for an hour or two. This, it is claimed, aids in involution and increases voluntary action of bladder and bowels. He leaves open the question as to whether embolism, prolapsus, or retrodeviations may follow, but claims that prolapsus will never occur unless there is a previous lesion of the pelvic floor, resulting from stretching or lacerations of the fibers. The fact that retraction of the torn ends is immediate, he claims, forbids the reunion of these injured tissues no difference how long the patient is kept in bed. In prolapsus, an etiological factor is atrophy of the pelvic floor, and long rest in bed increases the muscular weakness. Natural use of these muscles restores their tonus. His patients begin to be out of bed the third day, increasing the length of time up to the ninth day, when they are discharged. In the Vienna Lying-in Hospital, 160 women were confined in three months, and of these 102 were up the third day. In only one was there any temperature, this being due to a beginning mastitis, which was relieved by Bier treatment. On the seventh day, the height of the fundus was at the level of the symphysis, and at the ninth day it had disappeared. Those of the patients who were multiparae asserted they felt better and were stronger than when nine days in bed.

The various experiences of the hospitals and private practitioners who have reported their cases in which early getting up was advocated is tabulated by Robert Mullerheim (Berliner Klinische Wochenschrift, November 8, 1909).

He at first objected to the gymnastic exercise in bed and also to the allowing of women to be up a few hours after labor and leaving the hospital at the end of the week. He has been convinced by observation that the gymnastic exercises have considerable value, but has adopted a middle course in reference to the radical change of posture. His idea is that however well the early getting up resulted in the hospital, it is of doubtful benefit if advocated among working women in their homes, as they are no sooner out of bed, than they resume their work. He doubts whether weakness of muscular walls of the abdomen, prolapsus, and ptosis of the viscera, will not follow later on, the examination made on the eight or ninth day being too early for a final conclusion.

As to the occurrence of embolism, the practice in Java is very interesting, and valuable object lesson. There the parturient is not allowed to go to bed after delivery. Embolism as well as prolapsus, anemia, and neurasthenia are very frequent. Mechanical thromboses without fever in

cases of heart and circulatory disturbance are found to occur more especially in pelvis, and legs, resulting from the slowing of the circulation. In these cases, Mullerheim asserts muscular movements and aids to increased circulation are of value. In septic thrombosis, any exercise invites serious results. Hence he concludes early rising should be carried out only in carefully selected cases.

I was particularly struck by the contrast to these German obstetricians, in a consultation case met last year in which a normal primipara was kept for five weeks by the obstetricians in charge, lying on her back, and not even allowed to get up to empty the bladder, for no apparent reason, that I could see, other than a persistent pink lochia.

This led me to take up the question with several of my friends among the leading obstetricians of America, to find their method of teaching and practice. From these the following quotations are of great interest and inestimable value.

Dr. Reuben Peterson says: "If the patient is a working woman, and not too much exhausted by a severe labor, I think best to have her out of bed on the ninth day. Sometimes for one reason or another this period is cut down. I do not urge early getting up, not that I think it would injure the patient, but because rest in bed is favorable to the lying-in woman. I am very much opposed to the passage of the catheter in the non-pregnant, the pregnant, or the lying-in woman. If after twelve hours, the puerpera has not passed water after every effort to have her empty the bladder, I have the nurse swing her out of bed, and place her on the commode. I have done this even when stitches have been taken. It is usually successful. I urge the patient to lie on the side as much as possible to insure drainage. I allow her to sit up in bed after a few days. I have made no observation as to the involution of patients up early or those remaining long in bed. Personally, I think subinvolution, in the majority of cases, is a matter of infection, not of position of the patient. If no infection, involution proceeds normally. If there be sepsis, involution will be delayed."

Dr. Barton Cooke Hirst says: "I have so far modified my former practice as to allow a patient to sit up in bed after child-birth, to use the bed-pan, if it is impracticable for her to do otherwise. I do not allow the patient to get out of bed, because of the possibility of embolism. I had one case in which the patient got out of bed on her own responsibility about forty-eight hours after child-birth, and dropped dead on the floor alongside the bed, from embolism. While this is not common, still it is possible, and I do not think we ought to chance it."

Dr. J. Whitridge Williams writes: "I have not yet been able to convince myself

of the correctness of the advocate for early rising, and I believe it will soon prove a useless and possibly dangerous fad. I note that Dr. Charles White advocated it in 1780. Goodell also recommended it in the early seventies, but as the practice did not find many imitators, I imagine it was not found advantageous. It is my practice to keep the woman in bed for ten days or two weeks following labor, and then to allow her to be about on the floor on which delivery took place, until well into the fourth week. While patients are in bed no restraint is placed on their movements. They are allowed to do as they please as long as they do not get out of bed. They are allowed to eat their meals in a sitting posture. This is done whether the perineum has been injured or not.

"Concerning the commode, I do anything to avoid the catheter. Patients are allowed to sit upon the pan, and even to use the commode, if necessary, within twentyfour hours after delivery. I do not know what effect rest in bed has upon involution of the uterus, but I am now engaged with one of my assistant in studying the matter. For a number of years I have been impressed with the fact that my private patients, in well-to-do circumstances, upon final examinations four weeks after delivery, show a much greater proportion of displaced uteri than the women of the ward who are discharged at the end of two weeks. I now have the latter class of patients return at the end of two weeks for a subsequent examination, and am not yet prepared to state whether or not the same conditions will be found to exist."

Dr. Joseph B. DeLee says: "Regarding puerperae, and their posture, usually I ask them to remain in bed for nine to eleven days, quietly on the back or side for two days, then give them the full freedom of the bed.

"In the bowel movement, and urination, they may sit on the bed-pan if the result cannot be obtained on the back. Back rest is given from the eighth day. Out of bed ninth to fourteenth day, depending on labor (whether forceps, etc.), condition of lochia and fever."

The letter of Dr. Franklin S. Newell suggests that the method varies with individual cases. He does not keep the patient long in the dorsal decubitus after labor, but allows her to assume any position which she can while lying down, whether on the sides, or on her face, shifting the position as often as she desires, believing that a frequent change in position assists in drainage from the uterus, and also adds to the patient's material comfort. If able to use the bed-pan, it is approved during the first two weeks after delivery, but he prefers to have the patient raised in bed rather than to be catheterized.

Rarely he has allowed the patient up to the commode from time of delivery. Pa-

tient is kept practically flat for two weeks, the back rest is given first and at the end of the third week the patient is up in a chair. He believes involution goes on better in this way than if earlier allowed on her feet. He also believes that the patient gets up better both nervously and physically, than if she is to be earlier out of bed.

During the third week, the patient is encouraged to take such exercises for strengthening the abdominal muscles as she can take in bed, but the routine is varied to meet individual needs.

He finds his work dealing in an increasing degree with the unfit, and that three weeks is not too long for this type of woman to rest and recuperate.

The only possible disadvantage is the question of milk supply which is more apt prove deficient, but this he holds to be of minor importance compared with the gain in the patient's general condition, obtained by prolonging the convalescence.

Dr. Charles S. Bacon follows more closely the German method above outlined. He says: "My instructions for 'setting up' exercises in bed when ordered is generally that on the fourth day they begin and continue throughout her stay in the hospital. When allowed to get up, she is to walk across the room, and sit down, but will remain out of bed only ten minutes the first day, and twenty minutes the second day.

"The 'setting up' exercises are breathing exercises; arm flexion and extension; arm extension, foot flexion, and extension, and eventually thigh flexion and body flexion. About the seventh day, the private patient adds walk of a minute to each exercise.

After two days of walking, she is allowed to sit one to five minutes each time. The time of sitting is extended five minutes each time, until at the end of the third week, she is around as usual with the understanding that she always lies down to nurse the baby. Then she has the horizontal position twenty minutes to thirty minutes every two or three hours a day. This method I have evolved during the last ten years has been very satisfactory, favoring involution and frequently, as I believe, preventing enteroptosis."

Dr. Bacon has his patient try to urinate when the bladder becomes distended, as determined by her feelings, and by the external examination of the nurse. Within ten hours, if no desire is manifested, she would be urged to evacuate the urine even if the bladder does not seem distended. If she cannot urinate, lying down on the douche pan she may sit up or when necessary be out to the commode or a rectal enema may be given making the urination easier. The use of the catheter should be avoided, if possible, when, however, she cannot urinate even if sitting up or in case she is very weak after labor and sitting up is not to be allowed, she should be catheterized.

Dr. J. Clarence Webster writes: "I am

certain that patients recover strength less quickly when they are kept too long in the recumbent posture, I do not use the catheter until twelve or fourteen hours have elapsed after labor, and all other means have in the meantime been exhausted. The back rest is used the day after labor twice daily at first for a short period, then for a longer period and more frequently. I advise sitting up out of bed for a short period the twelfth day, a few steps being taken on each occasion, the commode is to be used after the fifteenth day. While I have made no study of involution as regards the various methods of conducting the puerperium."

My own method has grown from the observation of 2,700 cases of labor seen in private practice, and in the clinic, in an experience of twenty years. I was taught as a student to have the woman on her feet the tenth day. This rule was excathedra, and admitted of no discussion. It is no doubt of good average limit, for those mothers whose circumstances compel them for economic reasons to early resume their responsibilities regardless of future conditions of the pelvic organs.

In recent years, however, I have found that all women are not given the same recuperative powers after labor any more than that all men are created free and equal, two arguments which are based on wrong premises.

The number of women who have prolapsus and retrodeviations taught me that there was a cause for the conditions. I attribute these conditions to relaxation and subinvolution which I believe is benefited if not cured, by rest in bed during the time the lochia rubra persists. Consequently, I have made a rule years ago that the woman is to be on her feet when she can have a record of two days in which no red color is shown. This puts my average patient up about the fifteenth day. She walks to a chair, is up an hour, increasing the limit daily, as she shows her recuperation, judging by the lochia, and height of fundus. I examine her the fourth week, and caution her to lie down part of each day through the sixth week. I have had the fundus at the brim by the ninth day, and the lochia serosa at the same time, and I have had the patient in bed eighteen and twenty days. Usually she may be up half the day the third week, and out the fourth week, but I find a routine practice during the first ten days of raising the head of the bed eight or ten inches an advantage in assisting drainage without subjecting the patient to any effort or exertion as she is when on the back rest. Our American women of the better class are not to be compared in their physical strength with the German peasantry, so that conclusions drawn from hospital statistics of the latter class can not serve as a criterion for us in putting the patient on her feet. On the other hand, the modern young mother of the present generation

who has had an education and an opportunity to live a normal life under direction of her advisor will be found to come through her ordeal in better shape by the adoption of the conservative rule than if she followed the heroic teachings of our brothers across the sea.

As to the change of posture in bed my own experience has led me to allow the patient to be turned on her side after the first few hours, this gives her a sense of comfort after the long enforced cramped position on her back with the knees flexed, as she was during labor. I have never been unfortunate enough to see a case of embolism following labor, but appreciate that one is never too old to learn.

A vexed question as to the lying-in has always been that of the emptying of the bladder. My early teaching was in case of laceration requiring repair to put a binder around the knees, and always catheterize. In the light of present day methods, this plan is inexcusable from any point of view.

My students are instructed to make the catheter a last resort. The patient is to be urged to use the pan while lying on her back with various devices of pitcher douche, water poured from a height into a vessel or from a faucet to aid by suggestion the emptying of the bladder. If this expedient fails, she may be turned gently over on her face, lying across the pan to aid by gravity the expulsion effort. Then as a last resort, rather than to catheterize, she is, if the pulse is ninety or under, allowed to be helped out to the jar, which giving her the upright posture usually accomplishes the desired result.

Contrasted with my early teaching when the patient was kept on her back for voiding the urine, and the catheter passed under the sheet to avoid exposure of the person of the patient, the German practice as given by my quotations in beginning this paper are revolutionary.

The question then is one in which there has been room for great divergence of opinion throughout the history of midwifery practice. My friend, the late Dr. Theophilus Parvin, whose writings I consider to rank with those of Charles D. Meigs, and Sir Thomas Watson, as examples of medical classics, quotes Sydenham, whose wise observation taught him that those who die after child-birth the result was in many cases from getting up too soon, that was before the tenth day. The axiomatic statement of Dr. Churchill, the famous obstetrician, was that for one evil result from error in diet, he had seen ten from assuming an upright attitude or too early leaving the bed. Dr. Parvin closes his argument with the advice that it is better to keep a woman a week too long in bed rather than to be up a day too soon. The condition of the woman is a better criterion than the number of days after labor. While sitting up in bed may be permitted for most patients

during their meals after the third day, it is better that the puerpera remain in her room for at least three weeks.

So while a number of men who have favored a policy of extreme rapidity in the putting of their patients on their feet have been able to produce arguments which, if always based on facts must be very convincing as to the individual instance, still, on the other hand, the majority of the profession, during all the ages has adhered to the more conservative method. I would therefore make a plea for more uniformity in teaching the subject of posture in the puerperium, basing the conclusions on observation by the obstetricians in our great maternity hospitals, as to the effect on these cases as regards involution and recuperation where the two extremes are practiced.

In the meantime, the rule to be laid down from the present state of knowledge, is that the involution of the uterus, the color of the lochia, and general condition of the individual patient must govern the conduct of the case, rather than an arbitrary time limit based on the number of days following delivery.

DISCUSSION.

Dr. C. A. Ritter: The doctor has given us the habits of the German people, their methods being in the extreme of American people. Their patients get up early, due to the fact that their women are healthier than Americans. These women are not people of leisure of the modern people of America. The authors he has quoted are more conservative, realizing there are danquots by Dr. Mosher are normal. These were not cases where there was fever. We must be governed by our own experience, and must take into consideration the nature of the tissues and the condition of the uterus before pregnancy. We know of the monstrous weight of it. The average weight of the uterus after delivery is two pounds, and when this uterus will reduce to the weight that will not interfere with its support when the woman is on her feet must be settled by taking into consideration the health of the patient and the progress of labor. These things are governed largely by the environment, previous health, present health and progress of delivery.

I have had cases in the east bottoms where the women would be in the market in five or six days (Belgians, Germans and French.) These women had cares of the household, and you could not keep them in bed. There is a difference in the class of patients. High school girls invariably have to have forceps used. The involution depends, of course, on the reduction of circulation and reducing of the organ. This takes about twelve days. Some women will flow longer than others and there is slower involution.

There are injuries of lying in bed if you are not careful. We must get drainage of

the uterus. A hard, well contracted uterus is a barrier against infection, a soft one is a field for infection. Therefore, after the first 24 hours I put the patient's bed higher at the head. Now you have drainage, diminished blood supply, and after patient goes along a while, let her lie anywhere she wants to. You must not keep a patient on her back all the time. I put my patients on the commode in four days. Encourage the patient to urinate, but never use the catheter. You notice that on the second, third, fourth and fifth day the patient eats well; later she does not eat so much, and then is just when she should eat more. Get that patient into the fresh air and she will improve. I say, anything to assist in involution. Use no douches. Keep the bowels open, giving the uterus plenty of room. Feed your patient well.

Dr. C. Lester Hall: The proper caring for a pregnant woman, the carrying her through her confinement and getting up is the most important work of a physician. We are dealing with two lives. We are governed largely by our own experiences in arriving at conclusions. I have tried the earlier rising to my heart's content, thirty years ago. French obstetricians were advising getting up early. I allowed my patients to get up in a few days until I was satisfied it was wrong. Since then I have been more conservative. They can get on the slop jar within six or eight hours after confinement. If there is no laceration, the instructions to the nurse should be to allow the patient to do so. Not only allow it, but suggest it, to empty the bladder, and let the clots drain away. Many of the cases of septicemia might be avoided if we would have our patients drain the bladder. This avoids the damming up of the uterus or vagina. You have noticed frequently the discomfort of the patient; that involution is not progressing; that you will allow the patient to get on the slop jar, a clot is passed, and involution helped. I see no objection in allowing the patient to get on a chair early, I do object to the patient lying in bed all of the time during the lying-in period. It is absolutely wrong for a woman to lie in bed all of the time on her back. After the first two or three days I instruct my patients not to lie on the back, but to lie first on one side, then on the other with head elevated to help the drainage.

I am an advocate of conservative treatment. I am equally opposed to keeping a woman on her back, or too still. To guard against displacement, with sterilized hands, I examine the uterus early and begin to correct the position. I am satisfied that there is advantage in giving every case of labor a dose of ergot. I give it to all of my patients. It helps to contract the uterus and I think it is well to give it in small doses for two or three weeks.

Dr. H. C. Crowell: This paper gave us a good resume of the opinions of obstetricians and it seems to me that when we see what these old obstetricians taught that we are going back to get what we can learn from personal judgment. There is a difference in persons. Some women have a resistance that enables them to do what others cannot do. It is particularly noticeable in working classes and in those who do not work. Take women who have never done muscular labor, society people. There is in this class particularly a very great difference in resistance. If these patients are free from infection, if the uterus is thoroughly empty, if there is involution, they can do what they like, whether in bed or up, but there is one thing they should not do and that is to lie on the back. A patient should not lie on her back more than 24 hours. Turn on side, face, any way, but not on the back. If there is no infection, no laceration and there is involution, the patient should get up to a jar every day. In a few days she should be sitting up a little every day. Involution is undoubtedly hastened by the use of ergot, and it is the one drug we have that contracts the uterus. First start with a full dose, then decrease daily until ten days have passed. And as far as emboli are concerned, there is little danger if there is no infection.

Dr. Chambers: Much has been said about conservative treatment. Many of these cases, if kept in too long, would not be getting conservative treatment. I first kept women in nine days. Young, muscular women, with no injuries, it always seemed unnecessary to keep them so long. I have fallen into the habit of encouraging them to move over the bed and to the chair, and take as much liberty almost as they felt disposed to take, of course keeping those in bed showing any unfavorable symptoms.

Dr. Mosher (closing): It is a matter of intense interest that in these few days immediately following delivery ought to be the time when the after health, as far as pelvic organs and involution are concerned, should be well established. I believe the rule is a safe one that a woman should not be on her feet too early. Of course some patients have a resistance that enables them to do things that other patients cannot do, but we cannot lay any rule down and make all patients fit our rule. As to emptying the bladder this is a vexing question, but I notice that all physicians who are observing practitioners stay clear of the catheter. The douche is a passing fad. Its passing is reducing infection. Its use by the nurse is very dangerous unless the physician is present. The nurse may wipe the nozzle with her apron after dropping it on a dirty floor. Two things let's keep our patient away from, the douche and the catheter.

DEPARTMENT OF EUGENICS

"Heredity may be direct, the offspring showing the lesions of the disease at birth, as in syphilis. In the majority of cases, a certain stamp or type of tissue and organization is transmitted which renders the individual vulnerable to special micro-organisms, as in tuberculous subjects, or liable to perversions of the nervous system, or prone to degenerations and disturbances of metabolism."—Butler, in *Diagnosis of Internal Medicine*.

"The Eugenic theory, as advanced by Galton, which has for its object the preventive of the birth of the unfit and undesirable, and the improvement of the race by encouraging the productivity of the fit and desirable is demanding the careful consideration of our profession. There are approximately 125,000 feeble-minded in the United States today, with an annual increase of 4 per cent. The cost to the state of maintaining these unfortunates approximates \$30,000,000 annually, and this, too, is increasing at the rate of 4 per cent. Add to this the loss of work which would be done by the men were they healthy and the aggregate cost would be \$45,000,000 annually. This feeble-mindedness becomes a great economic problem. Whether syphilis enters little or much into its causation, it is proven conclusively that a large per cent of these 125,000 should never have been born. The burden of the solution of this problem rests with the medical profession."—W. C. Stoner, M. D., and E. L. Keiser, Assistant Superintendent Ohio State Institution for Feeble-Minded, *Cleveland Medical Journal*, April, 1912.

Oliver Wendell Holmes once said to a mother of a mentally deficient child that a consultation should have been held at an earlier time. At the mother's protest that this had been done, Holmes replied: "Ah! the consultation should have been held some fifty ears ago."

Referring to Dean Sumner's Edict requiring a certificate of health before marriage, the Baptist Watchman of Boston says: "Wise lovers will see the wisdom and protection of such a proposed law as this would be. The unwise kind should be prevented from consummating their folly."

EUGENIS—RELATION TO CHURCH AND STATE.

Medical Times of New York says: It is criminal to allow physically and mentally deficient persons to marry and propagate their kind. Sentiment in favor of the prevention of such mis-alliances is growing rapidly and a decided impetus has been given the movement by Dean Sumner of Chicago, who demands health certificates from prospective bridal couples. Subjoined we give the opinions of some of the leading clergymen and physicians of this country on the subject.

We commend the June number of the Medical Times of New York and ask all readers interested in the subject to send for a copy of this number. We shall quote from the opinion or articles from time to time. The names of the writers and points of view, or "headings" of the several articles contributed, show that the subject is well covered and forms a valuable resume of facts.

CLERICAL OPINIONS.

Eugenics and the Church, The Very Reverend Walter Taylor Sumner, M. D., Dean of Episcopal Cathedral, Chicago, Ill.;

Instructor in Western Theological Seminary—Law Will Never Give Us Liberty, Rev. William Hiram Foulkes, D. D., Pastor of the Rutgers Presbyterian Church, New York—Clerical Medical and Educational Cooperation Necessary, Rev. Addison Moore, D. D., Asso. Pastor 5th Avenue Baptist Church; Deny Marriage to the Unfit, Rev. John Haynes Holmes, Church of the Messiah, N. Y.—An Important and Wise Plan, Rev. Bishop William F. Anderson, D. D., Methodist Episcopal Church, Chattanooga, Tenn.—Prevent Mating of the Unfit, Rt. Rev. Samuel Fallows, D. D., LL. D., Presiding Bishop of the Reformed Episcopal Church, Chicago, Ill.—State Rather Than Church Supervision, Rev. Henry M. Sanders, D. D., Madison Avenue Baptist Church, New York—Make Matrimony Safe, Rev. Charles H. Parkhurst, D. D., Madison Square Presbyterian Church, New York—Social Value From this Action, Rev. Wm. Jewett Tucker, D. D., LL. D., President Emeritus of Dartmouth College, Hanover, N. H.—Mawkish Sentiment Must Yield, Rev. George C. Peck, D. D., St. Andrew's Methodist Epis-

copal Church, New York—Bar the Physically Unfit, Rt. Rev. Wm. W. Niles, D. D., Bishop of New Hampshire, Concord, N. H.—Make the Physician Responsible, Rt. Rev. Chas. D. Williams, D. D., Bishop of Michigan, Detroit, Mich.—The People Will Solve the Problem, Rev. O. S. Baketel, D. D., Editor Methodist Year Book and of the General Minutes, New York—Fitness Should Be Determined, Rev. Joseph Silverman, D. D., Rabi of Temple Emanuel, New York—Cooperation Among Clergy Needed, Rev. Russell H. Conwell, D. D., Baptist Temple and President of Temple University, Philadelphia—The Necessity of Education, Rev. W. H. McMaster, D. D., President Mount Union College, Alliance, O.—Our Future Demands Action, Rev. William H. Crawford, D. D., President of Allegheny College, Meadville, Pa.—Would Excise Wise Discretion, Francis J. McConnell, D. D., President Depauw University, Greencastle, Ind.

MEDICAL OPINION.

Health Marriage a National Benefit, J. Wallace Beveridge, M. D., Cornell University Medical College, New York—Is Medical Examination Pramatrimonially of Both Contracting Parties Essential? Joseph L. Boehm, M. D., Formerly Professor Syphilology-Urology, St. Louis College Physicians and Surgeons—Sterilization, the Ideal Means, A. G. Rytina, A. B., M. D., Asso. in Genito-Urinary Surgery, College of Physicians and Surgeons, Baltimore—Church Law and Medicine Must Act in Unison, I. L. Nascher, M. D., Special Lecturer in Geriatrics, Fordham University, New York—Dispel Sentimental Haze, William Thomas Cor-

lett, M. D., Professor Dermatology and Syphilology, Western Reserve University, Cleveland, Ohio—Educational Influence, the Great Benefit, Jay F. Schamberg, M. D., Professor Dematology and Syphilology, Temple University, Philadelphia—Education is Necessary, Leon T. Ashcroft, M. D., Professor Genito-Urinary Diseases, Hahnemann Medical College, etc., Philadelphia—Ministerial Agreement Rather Than Legal Enactment, Edgar G. Ballenger, M. D., Lect. Genito-Urinary Diseases, Atlanta School of Medicine, Atlanta, Ga.—Extend Educational Measures, M. L. Heldingsfeld, M. D., Professor Dermatology and Syphilology University, Cincinnati, Ohio—The Physician's Certificate of Health—Isadore Dyer, M. D., Dean and Professor Diseases of the Skin in Tulane University, New Orleans, La.—Probate Court Sanction, A. Ravogli, M. D., Clinical Professor Dermatology and Syphilology University of Cincinnati, O.—Let Church and State Co-operate, Charles B. Davenport, Ph. D., Director of the Station for Experimental Evolution of the Carnegie Institution of Washington, Cold Spring Harbor, Long Island, N. Y., says: I think the Churches and the State might well co-operate in requiring a certificate not only as to personal health, but also the family, physical and mental history of each of the pair. Even if Churches alone made the requirements, a precedent would be created that would make it easier for the bride or her parents to secure a certificate from the groom. The provision also calls attention to the physiological nature of marriage and by giving a truer view will work toward a better mutual understanding between the married pair.

TO PREVENT THE PROCREATION OF CRIMINALS.

AN ACT

To Amend the Public Health, in Relation to the Operations for the Prevention of Procreation.

Introduced by Dr. Bush; Passed March 5, 1912.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Article eighteen of chapter forty-nine of the laws of nineteen hundred and nine, entitled "An act in relation to the public health, constituting chapter forty-five of the consolidated laws," as renumbered article nineteen by section five of chapter one hundred and twenty-eight of the laws of nineteen hundred and eleven, is hereby made article twenty thereof, and sections three hundred and fifty and three hundred and fifty-one of such chapter are hereby renumbered sections three hundred and sixty and three hundred and sixty-one, respectively.

Section 2. Such chapter is hereby amended by inserting therein a new article, to be article nineteen thereof to read as follows:

ARTICLE 19.

Operations For the Prevention of Procreation.

Section 350. Board of examiners; compensation and expenses.

Section 351. General powers and duties of the board; persons to be operated upon.

Section 352. Appointment of counsel to persons to be operated upon.

Section 353. Unauthorized and illegal operations.

Section 350. Board of examiners; compensation and expenses. Immediately after the passage of this act, the governor shall appoint one surgeon, one neurologist and

one practitioner of medicine, each with at least ten years' experience in the actual practice of his profession, for a term of five years, to be known as the board of examiners of feeble-minded, criminals and other defectives, which board is hereby created. The compensation of the members of such board shall be ten dollars per diem for each day actually engaged in the performance of the duties of the board, and their actual and necessary traveling expenses. Any vacancies occurring in said board shall be filled by appointment of the governor for the unexpired term.

Section 351. General powers and duties of the board; persons to be operated upon. It shall be the duty of the said board to examine into the mental and physical condition and the record and family history of the feeble-minded, epileptic, criminal and other defective inmates confined in the several state hospitals for the insane, state prisons, reformatories and charitable and penal institutions in the state, and if in the judgment of the majority of said board procreation by any such person would produce children with an inherited tendency to crime, insanity, feeble-mindedness, idiocy or imbecility and there is no probability that the condition of any such person so examined will improve to such an extent as to render procreation by any such person advisable, or if the physical or mental condition of any such person will be substantially improved thereby, then said board shall appoint one of its members to perform such operation for the prevention of procreation as shall be decided by said board to be most effective.

The criminals who shall come within the operation of this law shall be those who have been convicted of the crime of rape or of such succession of offenses against the criminal law as in the opinion of the board shall be deemed to be sufficient evidence of confirmed criminal tendencies.

Section 352. Appointment of counsel to person to be operated upon. The board of examiners shall apply to any judge of the supreme court or county judge of the county in which said person is confined, for the appointment of counsel to represent the person to be examined. Said counsel to act at a hearing before the judge and in any subsequent proceedings and no order made by said board shall become effective until five days after it shall have been filed with the clerk of the court and a copy shall have been served upon the counsel appointed to represent the person examined and proof service of said copy of the order to be filed with the clerk of the court. All orders made under the provisions of this act shall be subject to review by the supreme court

or any justice thereof, and said court may upon appeal from any order or any justice thereof, and said court may upon appeal from any order grant a stay which shall be effective until such appeal shall have been decided. The judge of the court appointing any counsel under this act may fix the compensation to be paid him. No surgeon performing an operation under the provisions of this act shall be held to account therefor. The record taken upon the examination of every such inmate signed by the said board of examiners shall be preserved by the institution where said inmate is confined and one year after the performance of the operation the superintendent or other administrative officer of the institution wherein such inmate is confined shall report to the board of examiners the condition of the inmate and the effect of such an operation upon such inmate, and a copy of the report shall be filed with the record of the examination.

Section 353. Unauthorized and illegal operations. Except as authorized by this act, every person who shall perform, encourage, assist in or otherwise permit the performance of the operation for the purpose of destroying the power to procreate the human species or any person who shall knowingly permit such operation to be performed upon such person unless the same shall be a medical necessity, shall be guilty of a misdemeanor.

Section 3. This act shall take effect immediately.

THE STERILIZATION OF CRIMINALS.

The Legislature of the State of New York has passed an act as set forth below, providing for the legal sterilization of criminals presented by Dr. Bush of Chemung County, one of the most eminent physicians in the western part of the State; a member of the present legislature, a very progressive man, who keeps in touch with the progress of scientific thought and endeavor.

The State of New Jersey has passed a similar act, and we understand that the officers of the state have carried it into execution. We are informed that legal proceedings have been taken to test the validity and constitutionality of the act passed in New Jersey, by an eminent legal gentleman, who intends to oppose it by legal proceedings. It will, of course, take time and observation to form any opinion of value upon such a question as it presents upon the generally received view of the laws of heredity.

We invite discussion upon the subject.

MEDICAL NOTES AND ITEMS

A "MORALS COMMISSION" FOR CHICAGO.

The Rev. Walter T. Sumner, dean of the Chicago Episcopal Cathedral and chairman of the Chicago Vice-Commission, whose recent report attracted a nation-wide interest, addressing the Chicago School of Civics and Philanthropy, said that all efforts to improve and reform vicious conditions would be limited so long as control rested with the police. Before the vice question in Chicago can be solved, he said, supervision must be taken out of the hands of the police and the power of dealing with vice conditions, now vested in the police department, must be handed over to a Morals Commission appointed with just that one thing in view. Then the whole problem would be treated more efficiently and more seriously than it is at present. Dean Sumner praised the city administration for what it had done along lines suggested in the vice report, but found conditions still bad. He noted that many cities, as a result of the investigations in Chicago, were beginning to start campaigns for municipal reformation along these lines. He was himself about to start upon a quite extensive tour, during which he would speak in various cities, from New York to Minneapolis, and at some colleges, on the lessons of the Chicago investigation. It was due to Dean Sumner's initiative, that this investigation took place at all, and to his persistence that it was conducted to such good purpose, with the promise of such far-reaching results.

PSYCHOLOGY OF COURAGE.

Referring in an editorial to the Titanic horror, American Medicine says:

The psychology of courage is interesting, but the manifestation of this mental attribute is so interwoven with other mental or psychic forces that it is extremely hard to place it and give it its true value. There are plenty of facts that go to show that courage or bravery in the face of sudden or violent death is most uncertain. Many

men who have lived lives and given abundant reason to lead us to anticipate the highest courage from them have proven at the end the veriest cowards. On the other hand there are plenty of those whose character, temperament and environment have led them to appear weak, vacillating and ignoble, but who at the crisis met their fate with the most sublime and splendid courage. Bravery, therefore, is a most uncertain quantity, and can never be predicated on the usual mental qualities or customs of an individual. Love, pride, trust in God, the psychology of the moment, the surroundings, the physical condition and many other factors are all woven into the fabric of courage and heroism, just as fear, despair, lack of control, and some of the same factors that under certain conditions give rise to courage, will cause the most arrant cowardice. No man knows just how he will act as such times until they come. Certain it is, though, that we all hope we can have the curtain rung down at the close and leave behind as clean, noble and uplifting a scene as that enacted by so many men as the Titanic made her last plunge. The doctors on the Titanic seem to have been true to the best traditions of our profession. Medical men with few exceptions have always died well. And after all that is said or done can one have a better or finer epitaph than "Death found him unafraid?" But we who live have our work before us and this calamity emphasizes certain important features. The medical profession is striving with all its strength and knowledge to save and prolong life. Does it not behoove us while we are driving back the hordes of disease to devote more thought and time to pointing out and urging greater efficiency in preventing needless accidents? In other words what is the good of saving countless lives from disease if they are only going to be sacrificed to the Moloch of carelessness and industrial negligence? In all sincerity we believe medical men should give this matter more thought and devote more attention to arousing humanity from its indifference or ignorance of physical danger.

BOOKS

The International Medical Annual. A Year Book of Treatment and Practitioner's Index. Contributors: Sir Charles Bent Ball, M. D., F. R. C. S. I.; Victor Bonney, M. S., M. D., F. R. C. S.; Francis D. Boyd, C. M. G., M. D., F. R. C. P.; Francis J. Charteris, M. D., B. Ch.; Carey F. Coombs, M. D., M. R. C. P.; John B. Deaver, M. D., Philadelphia; Prof. Dr. Anton Elschmig, Prague; Percy Fridenberg, M. D., New York; H. Wippell Gadd, F. C. S.; Edward W. Goodall, M. D. B. S.; Oscar C. Gruner, M. D., Lond., Montreal; W. Sampson Handley, M. S., M. D., F. R. C. S.; Charles Thurstan Holland, M. R. C. S., L. R. C. P.; Robert Hutchinson, M. D., F. R. C. P.; Robert Jones, F. R. C. S.; Norah Kemp, M. B., C. M.; Prof. Dr. Stephane Leduc, Nantes; Priestley Leech, M. D., F. R. C. S.; Charles A. Leedham-Green, M. D., F. R. C. S.; E. G. Graham Little, M. D., F. R. C. P.; Charles Fred, Marshall, M. D., F. R. C. S.; Keith W. Monsarrat, M. B., C. M., F. R. C. S.; Jos. J. Perkins, M. A., M. B., F. R. C. P.; D. B. Pfeiffer, A. B., M. D., Philadelphia, etc., etc. Thirtieth Year. New York: E. B. Treat and Co. 1912. Price, \$3.50.

The present volume of the "International Medical Annual" is on a par with the previous issues of this excellent summary of medical matters of importance, and there is no mistaking that its able contributors practiced patience and excellent judgment in collecting data. Each subject receives the attention it should to bring out the important features which have been discussed in the medical journals during the past year or two; hence the general practitioner may with the very least trouble keep himself au fait with many points which may have escaped his notice in the limited number of journals which he read. But not only will he find a well-arranged resume of the various subjects, but a number of original articles which, on account of their authoritative tone and conciseness of statement, cannot fail to interest and benefit him much more than would a number of long-winded articles for which he has neither the time nor inclination.

Part 1 is devoted to a review of Therapeutic progress during the past year with a Dictionary of Remedies and include two valuable up-to-date contributions, "Ionic Medication," by Stephane Leduc, and "Radio-Activity in Diagnosis and Treatment," by Charles Thurstan Holland.

Part 2 comprises a Dictionary of Treatment with review of Medical and Surgical progress during 1911.

A voluminous index of 36 pages, with the more important articles in heavy type gives the busy physician not only ready reference to any facts he is looking for, but the articles themselves furnish ample bibliographic notes to current literature.

MEDICAL AND DENTAL SOCIETIES.

The Davis County Medical Society met at Kaysville on June 1, 1912, and elected the following officers: President, John E. Morton, of Kaysville; Vice-President, B. L. Kesler, of Bountiful; Secretary-Treasurer, Frederic Clift, of Layton; Censors, C. J. Heath, Briant Stringham and Thomas J. Howells. In addition to the resolutions regarding the Owen & Smoot National Health Bills, it was decided to hold public meetings of the society in Davis County on matters connected with civic and public health.

The Odontological Society, of Salt Lake City, met at the Commercial Club on the 19th of June, when the following officers were elected: President, O. J. Monson; 1st Vice-President, I. B. Gordon; 2nd Vice-President, C. M. Hart; Secretary, Fred W. Meakin; Treasurer, D. D. Stockman. The society will not meet again until September.

At the recent annual meeting of the State Dental Association, Wesley J. Davis, of Salt Lake City, was elected President; Samuel Thatcher, of Logan, Vice-President, and W. G. Dalrymple, of Ogden, Secretary-Treasurer. A feature of the meeting was a traveling clinic from adjoining states, showing character of work done.

MISCELLANY

The Trustees of the American Medicine Gold Medal Award respectfully announce that the Medal for Nineteen Hundred and Twelve has been conferred upon Doctor William C. Gorgas, Ancon, Panama, as the American physician who in their judgment has performed the most conspicuous and noteworthy service in the domain of medicine during the past year.

WILLIAM J. ROBINSON,
CLAUDE L. WHEELER,
H. EDWIN LEWIS,
Trustees.

Mouth Disinfection.—There never was a time when so much thought was devoted to the prevention of disease as now. Among the latest and most effective measures for the proper care of the teeth and mouth, Redox Alkaline Dental Cream unquestionably stands first. It embodies every quality essential to cleansing, whitening and preserving the teeth. It is effectively antiseptic, delightfully refreshing and sufficiently alkaline to counteract that most dangerous of mouth conditions, acid fermentation. It is a remedy, par excellence, for relaxed or diseased conditions of the mouth—Pyorrhea, Rigg's Disease. For sale at all druggists. Samples on request. Prepared only by The Purdue Frederick Co., 135 Christopher St., New York.

The Menthol-Kelene Autospray.—(Fries Bros.) The Anti-neuralgic effects of menthol have long been known. It is familiar in its solid form as "Chinese Headache Cure," and was used by rubbing over the part affected. In this form, however, it was not sufficiently efficacious, and careful study has evolved a solution of menthol with kelene in the proportion of five per cent of menthol. The kelene gives the necessary energy and the menthol the duration, and applied as it is by the autospray it gives the happiest results. The well known and lasting effects of menthol, combining with the cooling, refreshing and immediate effects of kelene, produce a complete and prolonged alleviation, and it has achieved a most remarkable success. The spray should be projected upon the painful parts, carefully avoiding contact with the eyes, as

menthol, while not dangerous, is momentarily painful.

It is endorsed by the medical profession, many prominent physicians using it with the hope it will take place of the numerous headache reliefs, which are taken internally and have the tendency to upset the stomach or act upon the heart more or less dangerously. Menthol-kelene, being applied externally, is absolutely harmless, and it gives immediate relief.

Elixir Maltopepsine.—In anemia, loss of appetite and during convalescence, to promote assimilation when the appetite is impaired and an aid to digestion is desired, Elixir Maltopepsine, prepared by The Tilden Company, will afford the most satisfactory relief.

Reconstruction Following Typhoid Fever.—In some instances, the convalescence of typhoid fever presents a debility closely akin to a tuberculous predisposition, which indicates the need for more potent reconstructives than the stomachics and tonics usually employed for this purpose. This need is well met by Cord. Ext. Morrhuæ Comp. (Hagee). Usually in these cases the blood stream is thin, the processes of metabolism are interfered with and the vital powers remain far below par. The tissues are easily susceptible to graver infections, such as tuberculosis. Cord. Ext. Ol. Morrhuæ Comp. (Hagee) will prove its worth as an up-builder in this class of cases, charging the blood current with nutritious elements and finally overcoming the debilitated state. Its palatability gives it added utility, a feature worthy of consideration in choosing remedial agents of this character.

A Suggestion in Tetanus.—The physician who has ever faced the horrors of tetanus and has seen his ministrations go for naught, will not hesitate to add to this disease's classic treatment, any agent holding out ever the faintest ray of hope. Quite a number of physicians have employed Pasadyne, (Daniel's Concentrated Tincture of Passiflora Incarnata), in tetanus and some have reported favorably on it. It is advised, therefore, that Pasadyne be employed as an adjunct treatment in this disease. It possesses marked calmative powers, and may

mitigate the distressing convulsive seizures of this dreaded infection. A sample bottle will be furnished if application be made to the Laboratory of John B. Daniel, Atlanta, Ga.

A. M. A.—Dr. C. C. Haskell, of the Pharmacological Department of Eli Lilly & Co., was in attendance at the Atlantic City meeting of the American Medical Association.

Pollantin.—Dunbar's Antitoxin for hay fever, we believe, is the only serum to be of vegetable origin. The process of making the same is simple; consists of the isolation of the toxin contained in the pollen of certain grasses; Goldenrod and Rayweed, by precipitation with alcohol and salt, and injecting the same into blood of horses. The blood withdrawn is tested for its antitoxic content by certain tests, and failing to sustain them, the lot is destroyed. Thus uniformity of strength is assured beyond any question of doubt.

Tongaline.—That proper elimination is of the utmost importance to the well-being of mankind is amply proven by nature's elaborate system of eliminative and detoxifying organs. Tongaline by its highly stimulating action on the liver, the bowels, the kidneys and the pores, is the "ideal eliminative" and will promptly and thoroughly expel all poisons which have accumulated in the system as the result of sluggish excretory organs.

Greeley Units in Dental Practice.—No dentist would use a general anaesthetic without having immediately on hand a powerful hypodermic stimulant. No doctor does. The Greeley Laboratories Incorporated have placed on the market for the use of the dental profession a case containing an assortment of hypodermic cardiac and nervous stimulants to meet just such emergencies. The contents of Greeley Units lends itself to nearly instantaneous employment. There is nothing to adjust. Merely remove the cap, withdraw the stylet, insert the needle and force the contents of the tube into the living tissue. This saving of time in some cases will be the means of the saving of a life. The solutions are permanent and always ready for use. They should be kept in the most available position and replaced as used.

All hypodermic medications are put up in these tubes.

The solutions used in Greeley Units are compounded by George C. Diekman, Ph. G. M. D., Professor of Pharmacy, College of Pharmacy, New York City.

Clinical Experience With Bromural. By Dr. Schrieber, Berlin. Though we possess a large number of hypnotics those really suited for practice are but few. Some cannot be employed for a longer period, others fall with pain or fever, while still others have a cumulative effect. The choice of a proper hypnotic is therefore a matter of some importance.

For mild cases of nervous insomnia, particularly for women and children, the author prefers bromural. Good results were also seen where there was difficulty in falling asleep and in conditions of nervous excitement. It was also frequently employed in pulmonary cases. The observations of Dr. Senator, that the drug controls the night-sweats, could be confirmed.

The author prescribed bromural in all cases where an efficient and harmless hypnotic, suitable for continued use, was indicated. In mild cases of pulmonary catarrh, bromural is indicated for two reasons: it will relieve the cough and check the perspiration.

"Look to the Bowel."—When called upon to handle the bowel affections incident to hot weather the doctor should not forget that the very first thing to do is empty the alimentary canal of all fermenting, toxin-breeding food-waste—as quickly as possible and as thoroughly. For this there is nothing so effective as a good saline, such as Abbott's Saline Laxative. A full dose in a glass of warm water (quite warm) will clean out the bowel in from four to six hours.

Then, when the bowel has been emptied, an intestinal antiseptic ought to be given, especially when the stool is vile-smelling. The sulphocarbolates (as afforded in W-A Intestinal Antiseptic A. A. Co.) serve best for this purpose. Having done this much an astringent may now be given with good effect if astringent medication is indicated, as copper arsenate or cotoin.

To keep the bowel sanitary and to guard against relapses it is advisable to put the

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This line of treatment is strongly recommended and, by following it out, any and every doctor will have better results this summer than he has ever had before—that is certain.

It is too often forgotten that disease has its origin in the bowel tract; and it is surprising how many diseases, aside from those we are wont to look upon as purely intestinal, are the better handled by giving preliminary attention to the local bowel irregularity.

Slee's Glycerinated Vaccine Virus (Small-Pox Vaccine).—Our plans for serving our many doctor-friends with their biologic needs are working out beautifully.

After months of preparation we are now in position to supply the above, which we believe implicitly is at least "a bit better" than the best vaccine produced in any other laboratory the world over.

It is prepared and packaged at the Slee Laboratories under exactly the right conditions to assure a pure and potent vaccine. Everything involved is sterile and every precaution is taken to guard against contamination from beginning to end.

The laboratories themselves are miles removed from the smoke and dirt and the other contaminating influences of the city. Only young heifers in "the pink of condition" are utilized as the source of this vaccine; they are pastured and stabled out in the country and are rigidly inspected by the resident veterinarians at frequent intervals—to make sure they are fit.

In charge is Dr. Richard Slee, the originator of the glycerinated vaccine, which now is used universally, and who is admitted, by all scientific people, to be an expert in this special field of work. There is probably no man living who has had more to do with the actual production of vaccine than he; his practical experience extends over a period of seventeen years. Under such supervision is this vaccine prepared—an ample guarantee for our doctor-friends that it is trustworthy.

If used properly it produces an absolutely typical "take," without pus-infection, which is the bugbear of the doctor as well as the patient.

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This Glycerinated Vaccine Virus is prepared under Government License No. 6, granted after formal inspection by the authorities, as provided by law. The Slee Laboratory was one of the first to receive its license, as will be noted by the number assigned.

It is put up in glass capillary tubes of standard size, with all the necessary accessories, such as a scarifying needle, expression bulb, etc.

The price per package of ten tubes is \$1.50;; per package of five, 75c. All orders will be filled promptly on the day they are received and delivery thereon prepaid when cash payment is enclosed. Emergency orders received by wire will be rushed out by the first carrier.

Ask your druggist to stock this vaccine, thus guarding against delay in getting it when wanted.

Full directions for using, and precautions to be observed by the operator in vaccinating, are given on each package. Sole distributors, The Abbott Alkaloidal Company, Chicago.

A Common Form of Toxemia of Pregnancy—S. H. Blodgett (Medical Record, Jan. 13), from a study of over 1000 pregnant women in the Maternity Department of the Massachusetts Homeopathic Hospital for the past two years, concludes that many cases of vomiting of pregnancy are of pancreatic origin, as shown by acetonuria, diaceturia and a decided sore spot on deep pressure over the head of the pancreas. These patients, he claims, are relieved by the administration of 20 to 60 grains daily of sodium bicarbonate in abundance of water, which may be flavored with tea or lemon juice.

A Sign of Dermoid Cysts.—The American Journal of Surgery advises to scrutinize carefully every fistula near the anus. A skin-lined sinus in the median line, in front of or behind the anus, is congenital and usually leads to a small dermoid.

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MEDICAL ASPECTS AND SURGICAL INDICATIONS OF ENLARGED THYROIDS.*

WILLIAM SENGER, M.D.,
Pueblo, Colo.

An enlarged thyroid—whatever the type—should be of vastly greater interest to the general practitioner than it appears to be. Unfortunately, too many of us are prone to take refuge in the excuses so often repeated by the laity—that medical treatment of goitre is well nigh useless; that its surgery is terribly dangerous and will leave the patient with a horrible skin disease or devoid of voice or intelligence. On the other hand, let us see how the old line insurance companies regard a goitrous applicant. If the goitre has not increased in size for five years; has not degenerated; is not substernal nor exophthalmic; and if the applicant is less than thirty-five years of age—then and then only he may receive insurance, but always for the highest priced form of insurance extending over a limited number of years.

The enormous experience of the insurance companies must force us to believe that their statistics are correct; and if they decide so adversely against these people as acceptable risks, should we not awaken to the necessity of doing our best for them?

Again, our "oldest timers"—the Mexicans—are very prone to goitres. Whether nationality or environment does this, we do not know. If environment be responsible, will the next generation of Americans in this region prove so goitrous as the Mexicans?

As yet, we know of no sure prevention. The subject is enormous; the real investigators few; and the lines of research lead far afield. Final conclu-

sions will probably be reached by elimination rather than by positive findings.

Confusion arises from several sources—"The pathology of the thyroid cannot be understood without a thorough knowledge of its physiology." This we do not know. Again, as yet "clinical and anatomic forms of goitre are impossible to harmonize—for instance, the vascularity of the gland—of great clinical importance—is quite secondary, pathologically." For these reasons, nearly every scientist delving into the mysteries of the thyroid, gives us a different classification of its tumors. They distinguish, however, a **diffuse** and a **nodular** goitre.

The **diffuse enlargements** may be due to—

(1) Increase of all the elements—a genuine hypertrophy of the gland; or

(2) Enlargement, due to increase in number and size of the epithelial cells (parenchymatous goitre); or

(3) Increased size of the follicles, due to increased colloid content (diffuse colloid goitre); or

(4) If in one of the already mentioned forms—(the hypertrophic, parenchymatous, or the colloid) the vascular changes are prominent—we have the diffuse vascular goitre.

(5) The diffuse fibrous goitre is usually the result of inflammation and subsequent connective tissue increase in one of the three forms first given.

The **nodular** goitre is one in which only a circumscribed area of the thyroid becomes diseased, but with charac-

*Read before the Otero County Medical Society, April 9, 1912.

teristics within that restricted area which may be either hypertrophic, parenchymatous, colloid, vascular, or fibrous in type. These nodular goitres are prone to degenerate. To add to the confusion, there may be more than one type of pathological change in the same goitre, hence the numerous classifications.

The symptoms, for which relief is sought, are manifold. At first sight it would seem that the immense enlargements so frequently found in diffuse goitres would soon kill; but so long as the goitre shows approximately the same enlargement in all directions, the mechanical interference is slight, excepting in one way—cerebral congestion with its associated vertigo, and headache. This may be due to two factors—constant pressure on the great vessels of the neck, or to the constant variation in the amount of blood in the goitre, so that the circulation cannot adapt itself to constantly varying pressure conditions.

Nodular goitres, on the other hand, tend to produce marked effects upon surrounding parts. Depending upon the direction of the pressure, we may have interference with the pneumogastric, phrenic or the recurrent laryngeal nerves; local interference with the circulation or the production of various types of "goitre hearts"; or distortion of the trachea and larynx, the oesophagus and pharynx (which at times have been erroneously diagnosed as asthma, aneurism and carcinoma).

Another great type—the exophthalmic goitre—is a functional derangement most frequently associated with diffuse goitres; occasionally with nodular goitres, and rarely when no enlargement of the gland is demonstrable.

The tendency for the goitrous is in two directions—into the hands of the surgeon or into the hands of the quack. And yet, over one-half of these cases can and should be cured by the internist.

In passing it might be well to state that it is by no means a rare event for a goitre to disappear without any treatment—apparently without any change in the mode of living of the host.

Medical treatment of simple goitres is divided into dietetic, hygienic and medicinal.

Diet: Change the drinking water. The patient should drink plenty of good water—which should be imported if necessary. A vegetable diet is important. In addition, a careful regulation of the bowels must be insisted upon.

Hygiene: Plenty of sleep; plenty of fresh air; avoidance of mental and physical excitement or exhaustion,—in other words—the simple life.

Medication: The time-honored local applications of iodine are of value. A mistake, frequently made, is to use the tincture of iodine, which irritates. It is far better to use a bland iodine ointment, which must be discontinued as soon as there is the least sign of local irritation.

Electricity, either faradic or galvanic, applied locally, often acts well, principally by diminishing vascularity. X-rays have been used frequently—sometimes with excellent results—more often with failures. In using the treatment, it must be borne in mind that the skin of the goitrous is very susceptible to the X-ray burns.

Internally: Thyroid extract, 3—6 grains per day, should be given. Remember, however, that this is a potent drug and the first symptoms of over-dosage must be noted. Many of these simple goitre cases are anaemic, nervous or depressed—which conditions should be corrected as soon as possible by tonics—the basis of which should usually be iron—preferably in the form of syrup of the iodide.

Complete cures are frequent by following this outline. But our efforts

must not cease—for upon return to bad environment, bad drinking water, continued excitement or a meat diet, a relapse is only too frequent. The patient must be constantly guided and guarded for months, perhaps years.

The next step, should our efforts be unsuccessful, is operative. We should first resort to the legitimate injection treatment—although the quack's refuge. Usually some form of iodine is used for this purpose. My own preference, advocated years ago by Dr. Gunn, is to inject $1\frac{1}{2}$ drams of a 5% c. p. carbolic acid solution in distilled water. Inject once a week and in successive lobes if the condition be diffuse, otherwise only in the diseased portions. About a dozen injections will usually suffice. Inject deeply into the gland with the patient reclining. Watch the urine for carbolic acid poisoning. I have never seen ill results from its use.

In the use of other injections I have had no experience—excepting once. That case had been injected by a colleague with iodine. A few minutes after the administration, there was a diffuse swelling of the entire neck—closely resembling a cellulitis. Asphyxia was threatening from rapidly developing oedema of the glottis. Intubation was about to be resorted to. The swelling of the glottis soon subsided, however. The massive swelling of the neck continued for two days, then rapidly disappeared without further symptoms.

Radical operations for simple goitres have definite indications; the results are good, and the mortality, in the hands of the experienced, not more than one per cent.

All simple goitres, undergoing fibrous, calcareous, hemorrhagic, colloid or cystic degenerations, should be operated upon at once. If pressure symptoms are marked, or if abnormally situated; or if growing rapidly; or if sensitive to pressure; or if nodular in a person over forty years of age—any

such goitre should be referred to the surgeon. Occasionally, also, a goitre should be removed for cosmetic reasons only.

Exophthalmic goitre (or as Mayo better terms it, hyperthyroidism) is easily recognized when typical. Hundreds of cases are atypical. The prominent symptoms of which the patient complains may be seemingly in no way related to hypersecretion of the gland. No disease give us so many signs of a generalized toxæmia.

Not an organ nor a physiological function of the body escapes being disordered at some time during its course. Such being the case, should we be surprised when our patient seeks the advice of the quack after his disease has been repeatedly diagnosed erroneously from a transitory prominent symptom and the underlying cause is not recognized?

One case, under my care, will illustrate. A physician of undoubted ability referred a case of amenorrhoea of unknown origin. Careful physical examination would have revealed a slight tremor, pulse of 110, and thyroid enlargement. Two weeks after a partial thyroidectomy, the patient menstruated for the first time in seven months. Now—three years after the operation—the patient is still perfectly well. In other words, amenorrhoea—a minor symptom sometimes present in hyperthyroidism—became of paramount importance to the patient, and unconsciously her anxiety reflected itself upon the physician's better judgment when diagnosis was in mind.

In considering the treatment of exophthalmic goitre, we must bear in mind several factors—that medical treatment must be persisted in for months or years if a satisfactory outcome is to be expected; that in spite of such treatment sudden relapses are common; that degenerations and functional derangements of other organs are constantly progressing when such

treatment is continued unsuccessfully; that surgical interference will not cure and can never repair such degenerations; and finally, that the time comes when the surgeon refuses to operate because these degenerations are so marked that the patient cannot withstand the shock of radical treatment.

What, then, should the internist do? A good working rule is to treat the case medically for three months. If no improvement, refer to the surgeon. Medical treatment of exophthalmic goitre never produces the brilliant results found after operative interference, but should the patient be willing to persist in its use and should improvement warrant, it should always be tried. Many are incapable of persevering in the restrictions essential to control this disease, and these must go to the surgeon before it is too late.

In the medical treatment, above all things, enjoin rest, physical and mental, both during acute stages, and also when recovery seems complete.

Diet must be controlled just as carefully and persistently as we would in a case of diabetes. Indiscretions in diet are frequently followed by just as severe exacerbations in one of these diseases as in the other.

We must impress upon the patient the absolute necessity of avoiding all meats excepting a little poultry. He may eat vegetables, excepting beans and peas; raw fruits, excepting bananas, apples and berries. The basis of the diet, however, should be buttermilk or some of the fermented milks.

Some drugs aid. Sodium phosphate, $\frac{1}{2}$ dram with meals, is highly recommended. A course of calomel about once a week is of marked benefit.

Tonics, fresh air and careful attention to the numerous symptoms as they arise, are always in order.

Serum of thyroidectomized animals has a distinct influence on the symptoms, unfortunately but little effect on

the gland. The influence lasts only during the time the serum is given.

The cytolytic serum of Beebe still has its firm supporters, although the profession at large tends to believe that the results obtained are due rather to the associated general treatment than to any particular efficacy of the serum.

Another factor which must be recognized as of paramount importance is the mental attitude of these patients. For some unknown reason, their nervous system is constantly on high tension. Anxiety, fright or excitement of any kind is likely to produce an acute exacerbation of the disease.

Acute hyperthyroidism so frequently following thyroidectomy in Graves' disease is explained on this basis by Crile. As the result of a brilliant series of experiments, Crile concludes that this condition may be prevented by excluding the psychic factor, prior to and during operations. As his conclusions seem tenable, the internist must bring all his powers of suggestive therapeutics into play while dealing with this disease. But in spite of all that the internist can do, a large majority of cases of hyperthyroidism rightfully belong to the surgeon before it is too late.

Remember that the surgical border line of safety in the best of these cases is but slight. Every effort should be used to help the surgeon in his work. Let him have the patient before the degeneration of other organs is so far advanced that he returns to you a patient invalided for life—not because the operation has not removed the cause, but because the operation cannot repair the damage already done to the other organs.

In order to conserve that which remains uninjured, the post operative patient should invariably undergo a prolonged rest cure—with the treatment almost as rigid as already outlined.

Providing this class of cases has been operated upon before secondary changes

have taken place in the vascular and nervous systems, there are perhaps no such brilliant results attained elsewhere in surgery. Rapid recovery of perfect health is the rule. It behooves us, then, to constantly bear this fact in mind—these cases can be cured—perhaps medically—nearly always surgically, if taken in time.

Whatever the type of goitre it should be cured. Nowhere in the field of medicine is the delay more insidiously dangerous and unwarrantable. First educate the public that this disease can be cured, then cure them—medically if possible, and surgically if necessary—but cure them, and help prove to the world that another disease has succumbed to science.

REPORT OF A CASE OF CHRONIC EMPYEMA OF FOUR YEARS' DURATION, WITH OPERATION AND RECOVERY.

C. E. TENNANT, M.D.,

Denver, Colo.

Mrs. M. R.—Age 48; married at 26; housewife; has had four children; menstruated at 14—28-day type; five-days' duration; moderate amount; menopause occurring eighteen months ago.

Always in good health until four years ago, when she contracted a severe cold; sick for three months following this, having high fever with considerable cough. This continued almost constantly until about two years ago, when some difficulty in swallowing occurred, with profuse regurgitation of about four ounces of foul-smelling and tasting fluid, whenever patient stooped over. Was obliged to sit upright at night in sleeping.

Tests for an esophageal diverticulum proved negative. A skiagraph taken did not clearly demonstrate anything definite in the chest, and a tentative diagnosis of bronchiectasis was made and the vaccines recommended. This gave negative results. In June of 1911 Dr. J. N. Hall saw the case, and diagnosed an old empyema, and further study of the skiagram substantiated in part this diagnosis. Operation was then recommended, but was refused. In November, 1911, patient became bedridden and sudden profuse pulmonary hemorrhage occurred, the regurgitation of fluid still continuing.

Operation at this time was accepted, and resection of one rib was made, with patient in sitting posture, under ether anaesthesia, Dr. Ham. A pocket of foul-smelling pus was opened, and drainage introduced, followed by the use of the hyperemic suction cup. Relief was quite marked at once, bleeding from mouth having ceased, and patient able to lie down. Later the drainage tract was explored with the Nitze cystoscope, and an opening discovered leading into a bronchus, from which was discharging a thick muco-purulent material. After about five weeks the tract became so small that little discharge was found on the dressings, and the patient commenced complaining of increase in cough and expectoration, with rise in temperature.

The original incision was enlarged and larger drainage tubes introduced, with steady improvement. The patient has had since this last operation two definite attacks of bronchitis, but since the first operation the patient has had no hemorrhage, nor has she had, on stooping, the annoying regurgitation of foul-smelling matter into the mouth. She is now able to pick up objects on the floor with no difficulty, and she is also able to lie flat upon the pillow.

At this date, March 30, the chest incision has entirely closed and patient is in better health than she has been for five years past.

612 Empire Building.

A PELVIC BELT FOR THE MANAGEMENT OF DELAYED UNION AND UNUNITED FRACTURES OF THE FEMORAL NECK IN ADULTS; REPORT OF A CASE.

JOHN LINDAHL, M.D.,

Denver, Colo.

The diagnosis of delayed union and non-union of fracture of the neck of the femur is usually not a very difficult problem. The surgeon who is unlucky enough to have a case, where one or the other of the above conditions obtains, has the problem of diagnosis solved before he cares to admit it.

The symptoms are more or less shortening, advancement of the trochanter above Nelaton's line, unnatural mobility and some crepitus, and tendency to outward rotation. A skiagraph is indispensable, if obtainable, when the diagnosis is doubtful.

The causes of delay and non-union seem to be too numerous to enumerate. The following may be mentioned as the chief causes: Improper reduction, causing a too wide separation of the fragments; imperfect or inadequate retention apparatus, failing to retain the fragments in place, after proper adjustment. Shreds of periosteum, muscles, tendons or fascia between fragments. Fragilitas ossium, which is usually due to osteoporosis. Charcot's degeneration; chalkiness, due to lack of animal matter; rickets; osteomalacia; diseases like syphilis, septicemia, pyemia, marasmus, pernicious anemia, advanced tuberculosis, scurvy, inanition, deficient innervation and blood supply. Inflammation of bone and loss of substance as a consequence, atrophic resorption of the ends of the bones, which appear as the eroded ends of the carbon points in an arc light in the skiagram. The infectious diseases running a chronic course. Restlessness and

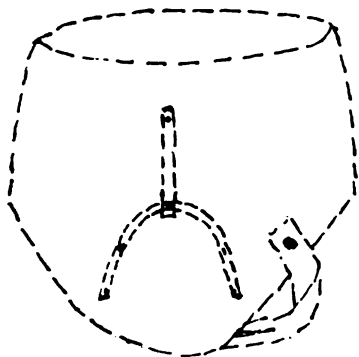
disobedience of the patient, and too early use of the fractured limb, before consolidation has taken place sufficiently.

Management of delayed union and non-union of the femoral neck. The first thing to engage our attention in non-union of the femoral neck is the shortening that exists and how to overcome it. The patient has already been confined to his bed for a longer or shorter time, and it is usually not desirable, on account of his general health, to so confine him to bed more than is absolutely necessary. The operative treatment of transfixing the fragments with a drill to be left in situ for some two or three weeks, is no doubt the best operative procedure. The patients, as a rule, are not willing to submit to operative treatment, and in delayed union and non-union there is not much prospect that union will take place in the limited time that the drill will be tolerated in the tissues. We have to look for something that will keep the fragments in position as much as possible, and when we have accomplished this, there will practically be no shortening.

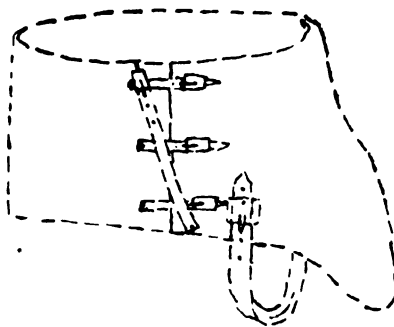
The plaster of paris spica, extending down over the limb to the ankle first, then to the knee to admit of motion in the knee, is used more than any other ambulatory splint, to maintain fragments in position and prevent shortening. The drawback to the plaster dressing is that it is almost impossible to get it snug enough to keep up the extension without compressing the cir-

ulation in the limb, and hence edema and its attendant dangers. Motion in the covered joint is interfered with. It loses its consistency and is inclined to slip up on the pelvis, and when it does the femur advances with it, with resulting shortening.

them from getting out of line. One buckle is fastened to the belt in front of the groin, and a strap lined with sheepskin is sewed on the belt behind opposite the gluteal fold. A slit is cut in this strap where it passes under the tuberosity of the ischium, so as to form



Side view showing reenforcement with steel brace.



Front view showing diagonal and split ischium strap.

To overcome these objections and shortcomings of the plaster cast, the writer has substituted a heavy sole leather belt of the very best material, closely moulded to the pelvis, extending up even with the crests of the ilia, downward over the great trochanter for 10 to 12 centimeters in front, on outside and behind. The front part of the belt should not be lower than the arch of the pubis. The belt is made in the following way: Take a piece of paper and cut out a pattern for the belt, after which the sole leather is shaped. This is soaked in water for 24 hours. It is then applied very accurately. A plaster spica is applied over the sole leather very tightly, extending half way down the thigh. This spica is to remain on until the belt is perfectly dry, which takes from three to five days. The belt is then taken off and lined with sheepskin, tanned on one side, wool to the surface of the body. Then three buckles and straps are sewed on the ends of the belt, so that it can be buckled tight to the body. One diagonal strap is placed over the ends of the belt, to prevent

a socket for the tuberosity, on which much pressure is brought, as it is this strap that prevents the belt from slipping up. The belt having been accurately moulded around and over the trochanter, as long as the belt is kept from slipping upward, the trochanter cannot advance upward, and the fragments are maintained in apposition favorable for union. The jarring that they receive from walking and using the limb, is conducive toward repair. Another action that the belt has is that of crowding the fragments against one another, as suggested by Sir Astley Cooper, who says that the fragments must be pressed against one another to facilitate union. The belt might be improved after it is finished by taking a cast of the trochanter with plaster on the inside of the belt, and making a pad after the cast and sewing this on to the belt in the exact place. A malleable inverted Y-shaped steel brace is riveted to the outside of the belt over the trochanter to maintain its shape, to prevent the perspiration from changing its shape by softening it.

Report of a Case. On July 13, 1910, the writer was requested by Dr. Cuneo to confirm a diagnosis that he had made of impacted fracture at the base of the femoral neck. The patient was a Greek, 21 years old, and gave the following history: Some three weeks before he had jumped off a street car in the middle of the block, and fell on the left hip. When he got up he found that he had practically lost the use of his left limb, but managed to hobble home, some three blocks away. A surgeon was called, and during the three weeks prior to seeing Dr. Cuneo he had five different surgeons, and spent two weeks in the hospital, where he was X-rayed. They all told him that it was only a bruise, and that he would be all right. When the writer saw him in consultation, there was eversion of the limb, with inability of active inversion, some crepitus, distension and bulging of the capsule, and one cm. shortening. He did not take the doctor's advice to have it set at once, but waited four days, till the fragments had unlocked, and the tissue surrounding the fracture had stretched, so at the time of setting there was 3 cm. shortening. Dr. Cuneo reduced the fracture, put on Buck's extension, with sandbags at the side of the limb, under the trochanter, so as to bring the fragments on the same level.

On examination at the end of seven weeks, there was no provisional callus thrown out, the fragments grated like rocks upon one another. It was evident that we were not going to have union in any reasonable time, if at all. We attributed the lack of union in part to lack of nourishment, confirmed by the patient's appearance. At the time of setting the fracture, instructions were, a generous diet with three quarts of milk a day and ten per cent of lime water in his drinking water.

This was not heeded for economic reasons. The patient was kept in bed for two more weeks, when a plaster spica was put on, extending below the knee, which he wore a couple of weeks. It did not maintain the desired extension, and edema of the foot and leg necessitated its removal.

At the writer's suggestion, a sole leather belt was improvised, as described, was put on and the patient instructed to use his limb with the aid of a crutch and cane. He was seen by Dr. Cuneo from time to time, till the latter part of March, 1911, nine months after the accident. When we examined the break there was no union yet, crepitus could be heard when he worked the rotator muscles. At this time there was inflammation and some distention of the capsule, some provisional callus was present; the digital fossa was partially obliterated by the callus. He suffered pain in the joint on walking, and claimed that he was as bad off as he ever was. Measurement of limb showed shortening $1\frac{1}{2}$ cm., apparent shortening much more on account of tilting of the pelvis. He was advised to use it less and have patience. He got disgusted and went to bed for 25 days. From this we probably have learned a lesson, that when a patient gets inflammation of a delayed union, the fragments should be kept in absolute rest for a month or more, to give the delayed union a chance to consolidate. When he started to walk again with the aid of crutch and cane, he found the limb in a short time strong enough to walk on, without a cane, and he has been using it ever since. The shortening is $1\frac{1}{2}$ cm., which is neutralized by curvature of spine, so he has only a slight limp. We attribute the small amount of shortening and favorable termination of the case to a certain extent to the pelvic belt.

ARSENIC AN ANTIHEMOLYSIN.

W. F. WAUGH, M.D.,
Chicago, Ill.

It has been determined that arsenic exerts on the red blood-corpuscles an action that antagonizes hemolysins. This opens a new and important field. It is well known that serpent venoms are compounds of several groups of globulins. Among the most dangerous are those that paralyze the vasomotor nerves and allow the blood to accumulate in the great splanchnic vessels, until cerebral anemia occasions fainting and suspension of cerebral control. Another group act as hemolysins, causing the red blood-corpuscles and other organized elements to disintegrate. These toxins are variously combined in serpent venom; and when the former predominate, as in the venomous Australian snakes, strychnine is a satisfactory antidote. But when the hemolysins are principal toxic agents, strychnine is only effective against the accompanying paralyzing bodies.

Arsenic being effective against the hemolysins, it seems that our best remedy for serpent venoms in general should be strychnine arsenate. Of this salt, which is well-defined and stable, I have frequently administered to adults a grain *per diem* with no indication that the dose had reached a toxic point. A quarter or sixth grain may

be given to an adult bitten by any venomous snake, and the dose repeated every half hour until the effects become manifest. It is best given in solution, by the mouth, and not swallowed.

In poisoning by toadstools the same remedy should be effective. The poisonous fungi contain muscarine, phallin, or both. Muscarine is destroyed by cooking, and completely antidoted by atropine. Nobody need die from muscarine if he eats his mushrooms well cooked or has enough atropine within reach. Phallin is a hemolysin, and with this new discovery, we should give arsenic for any form of mushroom poisoning that atropine does not control.

With both, the only rule as to dosage is to give enough to induce decided drug effect, and maintain it. Failures are due to timidity. The effect is antitoxic, and enough must be given to neutralize the toxin; and there may be very much of this.

The slightest intelligent study of drugs by modern scientific methods suffices to reveal unsuspected possibilities in old remedies, justifying my contention that the surface of drug therapeutics has scarcely been scratched.

PRECORDIAL PAIN.*

TRACY R. LOVE, M.D.,
Denver, Colo.

On December 15, 1910, I was called upon to do a post mortem on a man who had been a traveling salesman, age 35, and obtained the following history of the case:

He had been perfectly well until the previous July, when he first com-

plained of aching and weakness in the arms, which was especially noticed on carrying his suit cases. This trouble passed off in about two months. In the following October, he had an attack of pain and stiffness in the left leg, which was very severe for a few hours, but

*Read before the Medical Society of the City and County of Denver.

passed off the following day. Later in the same month he began having attacks of pain in the lower sternal region, extending a few inches to the left but not into the arm. The pain was very sharp—so sharp, in fact, that he could not speak during the attack, but it only lasted one or two minutes. These attacks of pain were infrequent at first, but gradually became more numerous and were induced by comparatively slight exertion.

There was no dyspnoea, but the lips were somewhat cyanotic, especially toward the last. There was a moderate amount of indigestion, but no dizziness. He had been told that he had rheumatism of the heart and dilatation of the stomach, and from what I can learn I judge that aneurism of the first portion of the aorta had been suspected. He died suddenly one night, complaining of much pain over the heart.

The autopsy was confined to an examination of the heart and the great vessels. The auricles were normal in appearance. The left ventricle was considerably hypertrophied, the walls being over an inch in thickness. The right ventricle was somewhat dilated and the walls quite thin, being not more than $\frac{1}{4}$ inch in thickness.

Just above the aortic valves there was an irregular mass of ante-mortem clot about one and one-half times the size of a robin's egg. This clot was distinctly laminated, consisting of dark, tough masses separated by thin layers of fibrin. This was adherent to the aorta above the right posterior and anterior valve flaps. A thick curtain of this clot was hanging down behind the anterior valve flap in front of the opening of the right coronary artery, but not adherent over it. This interfered greatly with the circulation of this artery. The left coronary artery contained a post mortem clot, but the other one was empty. I later learned that lues existed in the family, and this was without question a specific endarteritis,

a fairly common condition, but I believe of sufficient interest in the case to be reported.

The pain this man suffered was doubtless due to the stretching of the right ventricle as a result of interference with its blood supply.

Early one evening last November, I was called to attend a young woman said to be dying of hemorrhage from the lungs; and upon my arrival found the patient sitting huddled up in bed, leaning slightly forward, breathing rapidly and irregularly, with mouth open and alae distended, somewhat cyanotic, and evidently in great pain. Under the bed was a basin one-third full of watery, foamy, bright red blood. She had been sick four hours.

A hasty examination showed the anterior portions of both lungs to be full of moist, bubbling rales, with marked dulness, but no friction rub, just above the normal heart dulness, over an area two inches square. Over this area the rales seemed more numerous and larger than elsewhere. The patient complained of severe pain in this same area, some pain even extending to the back. The pulse was regular, unusually strong, and 120 to the minute.

Upon questioning, I found that the patient was 25, had been in Colorado two years on account of her health, but had not had night sweats nor lost much weight, and did not cough. She did not look the part of a patient with rapidly advancing tuberculosis, and I noticed that the pain was not associated with respiration at all.

I therefore felt that tuberculosis failed to explain her condition, and turned my attention to the heart again. It was enlarged slightly to the left, and a soft systolic murmur could be heard in the region of the apex, with a loud presystolic murmur and a diastolic murmur over the pulmonic area. There was, however, no Corrigan pulse or other sign of aortic regurgitation.

Moderate doses of morphine sulphate and the free use of oxygen soon gave the patient relief from the hemorrhage and pain, and within 36 hours the pulmonary edema had disappeared and the patient was as bright as ever.

I believe that in this case the precordial pain was due to acute dilatation of the left auricle, resulting from a marked mitral stenosis with incompetency. The attack was induced by a day's unusually hard work.

AMERICAN PROCTOLOGIC SOCIETY.

Fourteenth Annual Meeting, Held at Atlantic City, N. J., June 3 and 4, 1912.

The following is an abstract of the principal papers read:

PRESIDENT'S ADDRESS.

RELATIONSHIP AND DUTIES OF "THE PROCTOLOGIST" TO THE PROFESSION.

JOHN L. JELKS, M.D.,
Memphis, Tenn.

He stated that this society was an innovation when organized,—a strange vessel on the high seas. A child of American Medicine, it has now become a sprightly youth, with ambition and strength of purpose, having and exercising authority.

The medical world recognizes as authoritative, the expression of its fellows in the field covered.

He admonished discretion, thorough description and perfection of technic. Hasty speech or carelessly written papers cannot be erased or changed—as in their publication they become a permanent record.

He referred to the theories of our science, which were born of dreamers and nurtured by enthusiasts, and fancies no solid superstructure could be reared on foundations so infirm, and added that neither these, nor the honor, distinction, nor the gain they held out, should be sufficient to determine the surgeon to make merchandise of theories.

He called attention to the obstacles this society had encountered, because of these fragile theories, which had previous to its existence, been set up as targets for those who were unfavorable to the development and progress of this specialty.

He considered the true surgeon and specialist as humanitarian, whose purpose in life is to save life, restore health and happiness, and admonished him to shield and protect his brother from the darts aimed to destroy.

He also referred to cancer in the rectum, sigmoid or colon, which may have been treated as of minor significance until metastases are so extensive as to preclude hope

of a cure. He praised those proctologists, who have with much patience and fortitude labored for and finally have overthrown that unfortunate assignment of malignant rectal and colonic cases to untimely graves.

He stated that much harm has been done by the profession in the establishment of drug habits among the American people for the relief of constipation, as last year's symposium before this society would show, and says the proctologist is best equipped to study these cases, and arrive at the true etiology pointing to means of relief.

The American people are living in tin cans and cracker boxes, sparing time only to catch the next train, or meet the next market report, are storming their nervous systems with destructive toxins, filling sanatoria and health resorts with wrecks and lowering the scale of human usefulness and intelligence. None can more early observe the impending catastrophe, or turn on the search light as the procto-enterologist, and scientist, who calls together the aids of chemistry, physiology, pathology and bacteriology and a fair degree of understanding as to the results of the methods and habits of life of the average American citizen, who is less careful in the selection of and preparation of his own food than that of his stock.

He complimented the fellowship of the society, which is limited to fifty and has forty-three members, and stated no similar number of men are banded together in the civilized world who can boast of greater attainments for the science of medicine, or for humanity, almost every member being the author, or an associate author of a book, and these are all standard text or reference books in this branch, most of them also have been inventors of valuable instruments, or appliances applicable to this specialty.

He referred to some of the research work done by the fellows, and to the possibilities yet before them in procto-enterology.

He alluded to the intra and extra-rectal and anal and colonic infections, the roll they play and the possible developments of vaccine therapy and antitoxins in combating them. He stated that each fellow should carefully weigh his selected subject for these meetings, being mindful of the fact that the

general profession is looking to this society and its individual fellows for facts, not fancies; for proven remedies and technics, and not fads.

The society has attained an individuality, both national and international, and he reminded his fellows that there is labor yet to perform. That they must retain their progressive spirit and enthusiasm, lest they lapse into a state of self satisfaction when retrogression will mean their ending.

He referred to the fact that few of the hospitals of this country permit additions to their staff of specialties in proctologic work, hence the general surgeon and the general practitioner are doing the work in these institutions, about as these same men would do the ophthalmologic work, etc.

He recommended the addition to the American Medical Association of a section, in which the subjects, gastro-enterology and proctology, or procto-enterology may be discussed.

He advised closer confinement of the proctologists to this work, to the exclusion of general work, and believed this will receive from the profession greater respect for this specialty, and that fewer of this class of cases will be referred the general surgeon, or be accepted by him for treatment.

Conservative Life Insurance Companies are now convinced of the necessity of paying attention to the rectum and colon and such instances as the writer's confidential reports to alert examiners of cases of amebic infection, adenomata, papillomata, syphilitic and tuberculous diseases, which the examiner would have overlooked and impressed him with this fact, and he wondered if these and similar instances had not brought to the minds of medical referees the possible advisability of subjecting all applicants for large policies to a plurality of examiners. He advised the change of name of this society to that of the American Procto-Enterologic Society, and stated not one of the fellows of the society had found he could eliminate from his work intra-abdominal intestinal work.

PATULOUS ANUS: ITS CLINICAL SIGNIFICANCE.

ALFRED J. ZOBEL, M. D.
San Francisco, Cal.

The condition of patulous anus results from an abnormal loss of tone in the sphincter muscles, which may be due to either a fault intrinsically within the muscle, or to some disturbance in its nerve supply. When purely muscular the cause may be a direct injury to the muscle; an infiltration by a malignant or a syphilitic growth; a participation in a general muscular weakness; or the presence of a foreign body in the rectum which prevents the muscle from completely contracting. When the nerve supply to the

sphincters is at fault the causative lesion may be either central or peripheral.

Complete fecal incontinence does not necessarily follow when the anus becomes patulous. The external sphincter, when but slightly affected, sometimes is assisted in performing its function by an extra effort of the will and through augmenting the muscle's action by strongly contracting the gluteal muscles and bringing them together.

A brief report of a few very interesting cases of patulous anus is given to illustrate the different causes of this condition; among them being a case of infiltration of the sphincters by a carcinomatous growth low down in the rectum; a case, the result of pederastic practices; a case, the result of a participation in the general alcoholic neuritis; cases where it occurred in low intussusception of the bowel in children; and two cases where it appeared as one of the early signs of locomotor ataxia.

THE SURGERY OF COLONIC CONSTIPATION.

A REPORT OF THIRTEEN CASES.

LOUIS J. HIRSCHMAN, M.D.,
Detroit, Mich.

After presenting the histories, radiographs and reports of operative treatment of thirteen cases of obstipation due to colonic obstruction, dilatation, stricture and adhesions, Dr. Hirschman has formulated several principles in dealing with his cases requiring colonic surgery. They are epitomized in the following conclusions:

1.—Most cases of chronic constipation are colonic in origin and many are obstructive in type.

2.—Many cases of so-called chronic constipation are therefore really colonic obstipation.

3.—Many cases of colonic obstipation suffer from chronic dilatation of the colon with or without ptosis.

4.—Radiography is a most vital necessity in the diagnosis of all cases of chronic interference with bowel function. Its negative value may be greater than its positive.

5.—A chronically, over-distended colon whether adherent or not, never again becomes a normally functioning bowel.

6.—Intestinal adhesions usually tend to recur in increased intensity and adhesions only cause symptoms when put under stress or tension.

7.—The prevention of tension in physiologic rest to the affected organ and colonic rest is obtained only by colectomy, colostomy, or exclusion.

8.—Colectomy as advocated by Lane is an operation seldom advisable and has many obvious objections from the standpoint of patient and physician. It is too grave a procedure to be undertaken except in the most aggravated cases.

9.—Strictures, neoplasms, and other obstructions should be removed by excision of the diseased tissue and lateral anastomosis of the bowel.

10.—Exclusions by ileo-colostomy is safe, easy to perform, and most satisfactory in the restoration of normal peristalsis and consequently normal health.

11.—Results speak more eloquently than words. After an experience with nearly fifty cases requiring exclusion or resection of the colon for obstructive constipation with but one failure, I feel fully justified in recommending it to your careful consideration in all cases of aggravated colonic obstipation whether congenial, post-operative, or dependent on some mechanical obstruction or narrowing of the bowel.

THE ROENTGENOLOGIC METHOD OF EXAMINING CASES OF CONSTIPATION AND OBSTIPATION—A METHOD OF VISUALIZATION OF ABDOMINAL LESIONS OF THE INTESTINAL TRACT.

ARTHUR F. HOLDING, M.D.,
New York City, N. Y.

The author noted that current text-books on diagnosis written by eminent authorities are still copying cuts which were drawn by some artist rather than by an anatomist. Let us hope that the striking proof furnished (by the X-rays) of the fallacy of such teaching will be effective, and perhaps not one of the least results will be to cause true illustrations to be placed before our students' eyes.

The normal position of the colon and the parts of the intestine that can ordinarily be visualized by means of bismuth ingesta and the X-rays, are:

(1) The first portion of the duodenum; (2) the jejunum; (3) the ileum; (4) all parts of the colon; in some cases the second and third portions of the duodenum and the appendix, can be visualized.

The accuracy, reliability and interpretation of findings by this method, however, may well receive our careful attention.

In the first place, this method does not cause gastro-intestinal symptoms, such as nausea, vomiting, diarrhea, constipation, gastro-intestinal or general symptoms, other than are present when buttermilk alone is ingested; it is therefore logical to assume that the buttermilk-bismuth mixture does not irritate the mucous membrane and gives a true picture of the motor activities of the patient's intestines.

By fluoroscopy and by radiography in the erect or prone positions, or both, an accurate outline of the lumen of the tract can be obtained, especially where there is any obstruction to the onward progress of the intestinal contents. The individual peristaltic waves can be accurately registered on a special photographic emulsion that is far more sensitive than the human retina and the progress of the peristaltic waves can

thus be seen functioning under normal conditions, the patient and his abdominal contents not relaxed by a general anesthetic the secretions and motility not disturbed by the presence of an irritating foreign body such as a stomach tube; the conclusion not based on inference deduced from chemical reactions of juices obtained by abnormal and irritating measures. The organic outline obtained in X-ray plates is even more conclusive and reliable than the information obtained by the sense of touch wheahr that be applied over the intact abdominal wall or to the viscera laid bare by an exploratory incision. The radiographic emulsion and the retina are the two most sensitive methods of observation possessed by man, far out-ranking in their acuteness either the drum, membrane or the sense of touch. It has been contended that the abdominal operation was more accurate than an x-ray examination, because it laid bare the "naked truth," the finality of this argument is based more on the sound of the words than in fact, as anyone knows who has had an opportunity to use both methods on the same case.

On the other hand, there is great danger of arriving at wrong conclusions in using the x-ray method, especially when the examination is based on too few plates or is only an examination of a suspected part of the 30 odd feet of intestinal canal.

We must not let seniority interfere with our recognition of the superiority of methods employed by us for diagnosis. No progressive proctologist or surgeon should depend on any one method, but should use them all in examining cases, and in obscure cases he should not hesitate to insist upon supplementing the more common methods of examination with a radiologic examination, regardless of the expense involved.

The various lesions and conditions that have been successfully shown by the x-ray method are—atonic and spastic constipation; congenital anomalies of the tract such as non-rotation of the cecum and narrowing or insufficiency of the ileo-cecal valve; adhesions; kinks, with or without adhesions, (including Lane's); ulcers; tumors within the canal and tumors pressing upon the intestines from without.

It must be borne in mind that a palpable tumor disappearing after the administration of an enema or a cathartic, even if followed by improvement in the patient's condition, is not proof that the tumor was feces.

The Roentgenologic method of clarifying difficult conditions present in patients will no doubt be gladly welcomed and widely utilized by surgeons, who, as a class, deserve our greatest respect and admiration for their courage in attacking many ordinarily undiagnosable conditions by cutting boldly into the abdomen and making their diagnosis by inspection and thereupon instituting impromptu surgical procedures in order to correct the conditions found. Many times

the condition found within the abdomen is entirely different from that which was expected. When these difficult situations can be accurately known before the operation is begun; when the surgical procedures can be accurately predetermined; when much time (previously lost exploring the abdomen) can be saved; when the duration of the patient's anesthesia can be proportionately shortened; when the surgeon will be saved the tremendous nervous strain and responsibility of emergency decisions and procedures; the surgeon must recognize that his operative statistics will necessarily be better, his patients are going to recover quicker, and more of them, and finally the years of a surgeon's own life and usefulness will be increased.

The only great drawback to the general adoption of this method is its necessarily great expense.

MULTIPLE ADENOMATA OF THE RECTUM.

A Report of a Case with Symptomatic Relief by Simple Remedies.

E. H. TERRELL, M.D.,
Richmond, Va.

This article was a report of a case of multiple adenomata of the rectum and sigmoid in a patient 42 years of age, who had been suffering for the past five years. He had frequent stools with mucus, some blood and a great deal of tenesmus. He was having from eight to ten stools daily. He suffered considerable pain throughout the abdomen. Examination showed numerous small tumors scattered through the rectum and sigmoid. Microscopic examination showed these growths to be adenomas. The bowel was intensely inflamed and contained many ulcers. Under irrigation of the bowel with boric acid and the administration by mouth of castor oil and aromatic syrup of rhubarb, improvement was almost immediate. In three and a half months the patient had gained seven and a half pounds, and was comparatively comfortable. The tumors were reduced in size and the ulcers gradually disappeared. While the adenomas are still present, the patient is symptomatically cured.

Dr. Terrell emphasized the value of the administration of equal parts of rhubarb and castor oil, and thinks that in simple ulceration of the rectum, this treatment alone is almost a specific. He calls attention to many reports of cases in which adenomas of the rectum are supposed to disappear, and points out that this condition must be merely a hyperplasia with inflammation, and, not true tumors, for the latter are permanent. As regards the predisposition of adenomata to become cancerous, he called attention to the fact that these tumors are benign and are conse-

quently composed of mature tissue, so they can not themselves become immature tissue—which is malignancy. Instead of a malignant degeneration, it is likely that matrices of immature tissue have also been deposited where so many matrices of mature tissue are found, and the growth of the adenomata, with the accompanying inflammation and ulceration, stimulates these immature matrices to develop into cancer; or, else, immature matrices are formed from the ulcers, just as they develop from ulcers, in cancer of the stomach. The simple treatment which he proposed not only relieves the patient's symptoms, but by lessening the inflammation and curing the ulcers, it, also, decreases the chances for subsequent malignancy.

PIGMENTATION OF THE RECTUM AND SIGMOID.

JEROME M. LYNCH, M.D.,
New York City, N. Y.

The paper was based on six cases which came under the observation of Dr. Tuttle and himself. He divided pigmentation into Exogenous and Endogenous.

Endogenous—Hemochromatosis, pseudo-melanosis, melanosis.

Exogenous—Pigmentation due to chemicals; or metallic pigmentation.

He proceeded to discuss the origin of pigment, and considered Pick's theory concerning the origin of melanosis in pigmentation of the large bowel, particularly interesting.

It is as follows:

That the connective tissue cells possess an enzyme tyrosinase which converts aromatic bodies into melanin.

After having reviewed the subject of pigmentation, he reached the following conclusions:

That hemochromatosis is of bacterial origin; that the extent of the disease is dependent upon the severity of the infection; that the probable source of infection is the intestinal tract, possibly starting as an intestinal putrefaction; that this intestinal putrefaction lowers the vitality of the tissues, and thereby the cells of the mucous membrane lose their protective properties, consequently bacteria find ready access to the portal circulation. As a result of this the chromogenic function of the liver is interfered with, consequently the liver becomes surfeited with pigment, and is not capable of abstracting the iron from the hemoglobin, with the result that an excessive amount of pigment is circulating in the blood. That the cells of the intestine probably have a selective action for these pigments, and as a consequence they are deposited in the tissue. That local hemochromatosis may be due to repeated local hemorrhages, followed by infection, and

that, as a result of this infection the bacteria cause a hemolysis of the blood, forming pigment which resembles hemosiderin, hemotoiden and hemofucin. That these pigments may, or may not, give a reaction for iron.

So little is known about the structural products of melanin or melonoids, that it is difficult to give the origin of those bodies. Undoubtedly there are several distinct melanins, and their origins must also be distinct. The ferruginous melanins should be considered as originating from the blood pigment until further research proves the contrary. Most melanins yield endol, scatol and pyrol. It has been proved that the enzyme tyrosinase is present in the tissues and further that this enzyme is capable of converting aromatic bodies into melanin.

That Pick's theory is ingenious and worthy of consideration, we admit; but there are points that are hard to reconcile with our present conception of cellular activity.

It is hard to understand why he should attribute to connective tissue cells a highly specialized function; that this is directly opposed to all our preconceived notions of this cell, which heretofore has been supposed to have only one function—that of binding other tissues together, with an enzyme of its own nourishment.

It is a well known fact that the cells of the mucous membrane have the power of neutralizing poisons and converting them into insoluble compounds. In the case of mercury and lead they are converted into sulphides, and as a result of this change, blackening of the tissues, somewhat resembling melanin, takes place.

Drs. Tuttle and Lynch believe that the cases reported by the English observers, were as stated, and should not have been included in Pick's series. Further, that as a result of the action of sulphate of hydrogen on the iron pigments, an insoluble sulphide of iron is formed, blackening of the tissues takes place. This is a separate and distinct form of pigmentation, and should not be confounded with melanosis.

OBSERVATIONS UPON THE RELATIONSHIP OF TUBERCULOSIS TO PERI-RECTAL SUPPURATIONS.

COLLIER F. MARTIN, M.D.,
Philadelphia, Pa.

The author has found pulmonary tuberculosis so frequently associated with his cases of peri-rectal suppuration that he determined to report a consecutive series of cases, with findings.

The report comprises 376 consecutive cases, 75 per cent being males, and ranging in age from 7 months to 87 years. The majority of these cases (322) occurred in the most active period of life, from 20 to 40 years.

He divided his cases into four major groups; the actively tubercular (144 cases), the chronically tubercular (68 cases), the phthisenoid (20 cases), and those patients in apparently good health (55 cases). This would indicate that at least 212 cases, or 61 per cent, were cases of known tuberculosis.

There were 309 operations performed on 306 patients, under various anesthetics; spinal anesthesia 145 times; ether, 54 times, and local and other anesthetics on the remaining. He chose spinal anesthesia where no other preference was expressed by the patient or the attending physician, on account of the associated tuberculosis.

Following these cases for the past four years, he has traced thirty-seven deaths, of which thirty-four died of active tuberculosis or its complications.

The abscesses or fistulae in most of these cases could not be classified, from their appearance, as being locally tuberculosis. Where the tubercle bacillus was easily recovered from the tissues or discharges, there was usually a very active pulmonary infection present.

The writer believes that the usual explanation of the association of pulmonary tuberculosis with rectal suppurations lies in the fact that any pulmonary lesion, however small or inactive, may so alter the patient's vital processes and so lower the opsonic index, as to make him particularly susceptible to pyogenic invasion. The same may be said of pyogenic infections in general, but the peculiar anatomic conditions existing between the rectum and its very active physiologic function, makes this a fertile region for external and internal trauma with subsequent inflammation and infection.

Traumatism is considered to be the chief active factor in impairing the integrity of the tissues.

The writer emphasized the fact that a careful lung examination should be made in all cases of peri-rectal suppuration. He also made a strong plea for a careful and extended supervision of the patient's general health for a long period after all surgical treatment had been discontinued.

The vital consideration in these cases is not the question as to whether or not the local lesion is tuberculous, but has to do with the presence or absence of active or latent tuberculosis in the patient, and his chances of having good general health after surgical intervention.

ANO-RECTAL DISEASE DUE TO VENEREAL INFECTION.

JAMES A. McVEIGH, M.D.,
Detroit, Mich.

Venereal disease is an important factor in the etiology of disease in all parts of the human system. Regional relationship of genital organs to anus and rectum ren-

der the latter especially prone to this kind of infection. Venereal disease of anus and rectum either direct, through practice of vicious habits, or indirect, or accidental, through extension of infection to these parts from other sources. Less direct infection of this nature in this than in foreign countries. Gonorrhoea, chancroid and syphilis, the principal venereal factors in ano-rectal disease. Description of symptoms, diagnosis and treatment of these conditions when appearing in disease of the rectum and anus. Report of a case.

FURTHER OBSERVATIONS ON PRURITIS ANI: ITS PROBABLE ETIOLOGIC FACTOR BASED UPON ORIGINAL RESEARCH.

DWIGHT H. MURRAY, M.D.,
Syracuse, N. Y.

This paper was a continuation of the work that he has been engaged in for the past two years, and which he presented to the American Proctologic Society, at the Los Angeles meeting, in 1911.

From his experiences, since discovering that a skin infection is the important factor in pruritis ani, he believes that we are now in a position to state that there may be two varieties of pruritis ani; one that may be coincident with some of the diseases of the rectum and in which the skin infection is not present. He designates this form as pruritis ani simplex; the variety, which is chronic in its character, and in which the skin infection is present, he designates as coccygenous pruritis ani.

He states that he is continually seeing patients who have all varieties of rectal diseases, including chronic diarrhea and proctitis, in many of which, there is a leakage of moisture upon the anal skin; in very few of these cases does he find pruritis ani, and he believes that when it is present, it is coincident rather than having been caused by these discharges occurring in various rectal diseases.

He gives a resume of an examination of 900 consecutive cases, in which he finds 490 cases of constipation, 369 of hemorrhoids, and 94 of pruritis ani. Of the 94 cases which gave a history of pruritis ani, he finds that 5.5% of the 900 cases examined who had pruritis ani were constipated; 2.3% had hemorrhoids; 1.2% had some form of anal growth; 2.2% had ulceration; 2.5% had diseased crypts; 1.3% had hypertrophied papillae; 0.03% had polypi; 0.03% had fistulae. He believes that the relatively small percentage of each of these conditions that were present in the pruritis ani cases, show that they were coincidental when present and could not be classed as causes of pruritis ani.

Thirty-two of these 90 pruritis cases have been examined bacteriologically by him and all of them showed streptococcal

skin infection as the predominating condition.

He believes that the excess moisture and the infiltrated condition of the skin in these cases is due to the low grade inflammation caused by skin infection and is not the result of moisture coming from the inside of the anal canal.

He presented photographs of petri-plates, of a typical case, showing the immense numbers of streptococci at the time of the first examination; another photograph of the same case, showing that streptococci were not present in the culture taken from the anal canal, and another photograph of a petri-plate, of the same case, after four months of treatment (one month after itching had ceased), in which last photograph no streptococci were present.

He gives a report of his technic in greater detail than in last year's paper, because he has found that the last year's report was not understood by some physicians who had employed his method.

From some reports received, he believes that stock vaccines will not give good results because they are made of a different branch of the streptococcal family than the one causing pruritis ani.

He gives detailed reports of the cases treated, both of the first and second series, showing very marked improvement in all of the cases and cures, so far as present conditions are concerned, of others.

He presented a series of twelve control cases, having a variety of rectal diseases, that are usually given in text-books as causes of pruritis ani, none of which had the disease nor did they show a skin infection.

He said that the conclusions of the first year's work still hold true, and he gave the conclusions of his second year's work as follows:

First—It is shown by the nine hundred consecutive cases of rectal diseases that constipation and hemorrhoids, or any lesion, are coincidental or may be predisposing, but not the exciting cause of pruritis ani.

Second—Even when there is a discharge of pus or other moisture on the skin about the anus it is not the actual cause of pruritis ani, unless there is a streptococcal or other infection of the skin. They may exist together, but are then only a coincidence.

Third—All investigators, in making cultures, should use in addition to the hard media, the liquid media and Gordon's series of carbo-hydrates, if they wish to differentiate the streptococci and other bacteria.

Fourth—Avoid excessive reaction.

Fifth—Use small initial doses.

Sixth—Give subsequent injections only after the previous reaction has completely subsided.

Seventh—He suggests the following change in the nomenclature of pruritis ani,

by recognizing two varieties: Pruritis ani simplex, and pruritis ani coccigenous.

COLONIC DILATATION (CONGENITAL AND ACQUIRED) AS A FACTOR IN CHRONIC INTESTINAL OBSTRUCTION (OBSTIPATION).

SAMUEL G. GANT, M.D.,
New York City, N. Y.

The author stated that his experience warrants the belief that both acquired and congenital (Hirschsprung's) dilatation of the colon is fairly common, and that they respond satisfactorily to treatment (usually surgical). He said that non-congenital dilatation of the bowel might result from paresis, gormandizing, digestive disturbances or chronic intestinal obstruction, however caused, and when present, leads to constipation, fecal impaction, distension of the bowel, angulation, twisting and ptosis of the colon. He called attention to the fact that this class of patients suffered much less from intestinal auto-intoxication than persons afflicted with acute constipation. In his cases, the colon completely filled the abdomen, measured from three to many times its normal size, was considerably thickened, characterized by dilated blood vessels, and closely resembled an enormously hypertrophied stomach—for which it was mistaken in two instances. He mentioned having personally observed seven cases of Hirschsprung's disease and a still greater number of acquired dilatation, wherein the patients had an evacuation every two or three weeks, following purgation and frequent enemata; except in two instances, that of a young boy, who moved his bowels only once in two months, and, of a young woman, who succeeded in accomplishing this but four times yearly. He said the chief manifestations of the condition were those of chronic constipation and fecal impaction, plus mal-nutrition, abdominal distension, pot-belly, extraordinary length of time between the movements, and very large amount of feces discharged when an evacuation occurred; and that the diagnosis is fairly easy in the presence of the above symptom complex, because, with the aid of inflation and palpation or the assistance of the X-ray, the size and position of the colon can be defined.

The writer maintained that temporary improvement occasionally follows medication and physical measures, which strengthen the bowel or minimize the effects of auto-intoxication consequent upon fecal retention, and that patients may for weeks or years be kept fairly comfortable when given close attention and the bowel is kept open with lubricating oils, laxatives and frequent high enemata, but that

a cure is not possible except through one of the following surgical measures, viz.:

1. Coloplication.
2. Colopecty.
3. Resection.
4. Intestinal exclusion.
5. Colostomy.
6. Tapping.

He found coloplication effective in both congenital and acquired dilatation, without bowel displacement. Colopecty proved satisfactory where there was ptosis with moderate dilatation, but, in aggravated cases where the bowel was both enormously dilated and markedly ptotic, he advised coloplication and colopecty, using the infolding sutures for suspensory purposes.

He advised resection of all or part of the colon where it was irretrievably large, displaced or bound down by adhesions, and reported a case where the sigmoid flexure, descending colon and left half of the transverse colon were excised.

Exclusion had proven satisfactory, and he reported five cases treated by dividing the ileum near the cecum and completing the exclusion by ileo-sigmoidostomy.

Colostomy was looked upon with ill-favor because patients strenuously object to an artificial anus, and a secondary and dangerous operation is required to re-establish continuity of the intestines.

Tapping, he said, deserved no consideration, because it is unscientific, dangerous and ineffective.

In closing, Dr. Gant said that he frequently combined the above operations with appendicostomy or cecostomy, so that through and through irrigation might be immediately established and the period of convalescence shortened. He also stated that colonic exclusion and colostomy were considerably less dangerous than resection, and were usually effective, since the bowel rapidly contracts after their establishment.

ACUTE POST-OPERATIVE INTESTINAL PARESIS.

J. A. MacMILLAN, M.D.,
Detroit, Mich.

1. Definition—A paralysis of a portion of the intestine which suddenly dilates and becomes the receptacle for gas and fecal material.
2. Etiology—Not known, but probably due to sepsis, trauma, etc.
3. The lesion is probably in the sympathetic nervous system.
4. The treatment consists of gastric lavage, enemata and enterostomy.
5. Precautions attending a secondary operation.

PROPHYLAXIS AND TREATMENT OF POST-OPERATIVE RETENTION OF URINE.

FRANK C. YEOMANS, M.D.,
New York City, N. Y.

Ascertain and correct, if possible, lesions of the urethra and bladder in advance of operation.

Physiology of urination. Factors that interfere with it after operation.

Prophylaxis—urinary antiseptics and posture.

Treatment—suggestion, local applications, medicine, standing. Aseptic catheterization.

INTRA-RECTAL RUPTURE OF SUPPURATING SINUS FROM HIP-JOINT DISEASE.

RALPH W. JACKSON, M. D.,
Fall River, Mass.

To meet the difficult problems presented by an unusual case, involving the rupture, internally, into the rectum, and externally, near the anus, of a sinus from a tubercular hip, the writer has sought, by radiographic study, research of literature, and correspondence with proctologic and orthopedic authorities, information as to frequency, pathology and operative possibilities, of such cases; and with the following conclusions.

1. That intra-anal or rectal rupture of a coxitic sinus occurs rarely but not with extreme infrequency.
2. That such opening involves probably considerable mixed infection of the joint beyond what would occur if the opening were external.
3. That likewise tubercular infection of the rectum might arise.
4. That intra-anal opening is quite easily treated and much of the mutual risk of infection removed.
5. That intra-rectal opening is in most cases (unless the sinus approaches from low down) too high to turn aside in any way and give an external discharge, and consequently the risk must continue.
6. That operating for such purpose is likely to create at once a complete rectal fistula where none existed before, because of the surgical difficulties in the way of securing permanent closure of the internal opening.
7. That it is a very rare and most unfortunate occurrence for such an abscess to point both externally and internally; an external incision should be made, if sure that internal rupture has not occurred; but avoided, if possible, if it has occurred, because of the fistula thereby created.
8. That whatever the etiology, such a fistula is a particularly troublesome one, and the wisdom of trying to better it surgically is fairly debatable ground.

SOME PRACTICAL POINTS GLEANED FROM THE OBSERVATIONS OF A PROCTOLOGIST.

SAMUEL T. EARLE, M.D.,
Baltimore, Md.

Dr. Earle reported a case of primary tubercular ulceration of the right buttocks, which was not connected with the rectum by a fistulous tract. In this respect it differed from the one reported by him in his work on "Diseases of the Anus, Rectum and Sigmoid," figure 62, page 201. It was excised by the thermo-cautery knife, after which it healed very promptly.

Dr. Earle also reported a very aggravated case of pruritus ani, which had resisted local applications, autogenous vaccines and treatment by the X-ray. Under local anesthesia he found an ulcer over the posterior commissure just above the internal sphincter, which connected on each side with numerous submucous and subcutaneous superficial fistulae which enveloped the entire anal margin and connected with each crypt of Morgagni. The ulcer was incised, the scar tissue at its base removed, and the fistulous tracts were all opened up. There was only an occasional twinge of itching following the operation, and he made a speedy recovery.

THE SUBNORMAL COLONIC FUNCTION AS A DIATHESIS.

J. COLES BRICK, M.D.,
Philadelphia, Pa.

The writer was led to investigate the causes of a persistent case of constipation, which had existed since childhood, and which was of an average duration of 7 days, in a young woman of 18 who was in seemingly good health, but whose father having had the same condition, and who had subsequently developed a case of chronic antritis deformans. The young woman had been treated by many doctors and by many methods, but all without any more than temporary success.

Resort was finally made to X-ray examination after giving a bismuth meal. The plates showed that at two points, viz.: the cecum and the rectum, the colonic contents remained for three days, and operative measures were decided on. No abnormality was found except an old and thickened appendix, containing three concretions, and the tip being adherent to the ovary. As there were some moderate sized hemorrhoids present, these were removed at the same time as the appendix, and the patient made a good recovery. The X-ray plate showed a very moderate degree of visceroptosis, and a "Storm" belt was ordered. The patient has had a regular bowel movement daily, with the use of a mild laxative, which it had been impossible to produce at any previous time.

Examination of the X-ray plates showed a bilateral calcification of the costal cartilages, which the writer thought was an early symptom of arthritis deformans, and after discussing the various theories of the cause of the disease, accepts the theory that it is a toxic trophoneurosis affecting the cerebro-spinal nerves, with its infectious focus in the gastro-intestinal canal.

The essayist believes that all cases of persistent constipation should be examined by all the means at our command, and finally, not only by the administration of bismuth by the mouth, but by injection, with X-ray examination—conditions requiring operative interference will frequently be found by this means, and corrected surgically.

Arthritis deformans is a most ancient disease, and evidences of many cases are shown to have existed before the pyramids were built, and that it is not only possible but probable that the infection comes from the intestinal tract, and that if the cause is removed early before the destructive changes have occurred, these cases can be cured, and even the advanced cases have their progress arrested.

THE THREE-STEP OPERATION IN TUMORS OF THE SIGMOID AND COLON.

JAMES P. TUTTLE, A.M., M.D.,
New York City, N. Y.

Dr. Tuttle described the operation as follows: Incision is made in the outer border of the left rectus. Tumor is brought out on the abdominal wall. Peritoneal layers of the meso-sigmoid are incised well above and below the tumor, and stripped back so as to expose the blood-vessels, fat, and glands, which may be in the meso-sigmoid; the latter are stripped toward the intestine until the blood vessels are bare and the supply to the bowel is easily visible. The sigmoidal artery is tied in two places and cut between and the proximal stump dropped back into the abdominal cavity. The raw surface in the abdomen is covered over by suturing the two peritoneal layers of the meso-sigmoid together over the arterial stump. The two legs of the sigmoid are sewed together laterally to make a spur, after the method of Bodine. The peritoneum is sewed around the bowel; the muscles drawn together; the skin wound closed, attaching it to the bowel. In forty-eight hours the tumor is excised by a V-shaped incision. Two days later the spur is cut away by pressure-forceps. After this is completed, a long rectal bougie is passed up through the bowel beyond the artificial anus, in order to press the spur back and obtain a large caliber at the site

of the resection. When the wound made by the pressure-forceps is healed, the artificial anus is closed by the extra-peritoneal method of the author.

THE X-RAYS AS AN AID IN MAKING DIAGNOSES OF CONDITIONS IN THE RECTUM AND OTHER PORTIONS OF THE LARGE INTESTINE.

J. R. PENNINGTON, M.D.,
Chicago, Ill.

He stated that while the rectum is easily inspected by various specula, and the sigmoid is less readily accessible by the use of sigmoidoscopes, such as the one with insufflation devised by him, the colon is inaccessible and its exact position difficult to ascertain. Very often it is also difficult to determine and locate pathologic conditions in the large intestines.

Until recently, the means of diagnosis have been limited to those used in other portions of the alimentary canal, viz.: Inspection after dilatation of the bowel with air or water; palpation, percussion, and trans-illumination. All of these are open to the objection that they are uncertain.

The writer observed that in the latter part of 1899 that by introducing some agent into the large bowel which would cast a shadow, the X-rays may become useful in making a diagnosis of conditions in the twin cavities. It is only recently, however, that such procedures have become of practical value.

A bismuth meal is useful in diseases of the stomach or duodenum, the agent being suspended in milk, acacia water, thick soup or some similar vehicle.

But for the large bowel, the action of bismuth per os is very slow. One author estimates that it requires from 12 to 15 hours for the bismuth mixture to reach the ileocecal valve; about 24 hours to gain the transverse colon, and 36 hours to penetrate to the sigmoid. By the method advocated this is done, so to speak, instantaneously.

Coming now to the technic: The patient's bowels are first cleansed by means of laxatives and injections. He is then placed in the knee-shoulder position, and from 25 to 30 ounces of the mixture used for casting the shadow injected into the large intestine. For this purpose the author uses an ordinary irrigator and a short rectal tip. A long rectal or colonic tube for administering the injection is unnecessary. After the suspension is injected the patient lies on his right side for a few moments, so part of the menstrum may pass into the cecum. He is then placed in either dorsal or ventral position on the radiographic table and the picture taken.

FIRST AID FOR COAL MINERS.

Progress in preventive medicine is nowhere more aptly demonstrated than in the improved sanitary status of our larger industries.

Occupational diseases have long been responsible for a morbidity and mortality rate wholly irreconcilable with our achievements in scientific medicine. It is, therefore, refreshing to note that during the past year more has been accomplished in safeguarding labor than in any previous decade. Not only through private and corporate initiative, but by the intervention of Congress itself, industrial workers are securing a measure of protection hitherto deemed quixotic or impossible.

Laws have been enacted, for example, prohibiting the use of white phosphorus in the manufacture of matches, and still others requiring the use of certain standard mechanical appliances to lessen the liability of accidents among railway employees.

The newly organized Bureau of Child Labor will have as its specific function the execution of measures designed to remove the existing hardships and dangers surrounding the employment of children.

No agency, however, in this field of our latest endeavor has made greater or more permanent advances than the movement to ameliorate the distressing conditions associated with the daily life of the coal miner. Among the most dangerous of all occupations, coal mining has exacted a death toll in this country of staggering proportions. Repeated disasters and the long chain of misfortunes following in their wake have called forth the united efforts of the Government, the mine owner and the miners themselves in systematized methods to reduce these dangers to a minimum.

To this end, the Bureau of Mines has provided seven rescue cars, fully equipped for the work in hand and manned by specially trained crews. These cars are constantly moving from one mining district to another, the crews giving daily demonstrations in the use of the pulmotors and in first aid to the injured.

Pamphlets prepared by officers of the Red Cross are freely distributed, and contests among the miners sustain the interest of the men to a surprising degree.

Two of these rescue cars have been in commission the past year in Colorado and Wyoming. In addition, several of the larger mining companies have built and equipped cars for their own use.

Public contests among teams from the coal mines have been held at Trinidad and Walsenburg, and another at the School of Mines, Golden. The judges in these friendly tournaments have been chosen from the military service, and the tests given are made to conform absolutely with those experienced in time of fire, explosion, fall of rock or other emergency.

Surgeon Hotchkiss, of the Public Health and Marine Hospital Service, accompanied one of the cars for six months in this state, investigating the prevailing diseases among miners, especially that form of phthisis known as "miner's consumption," and also undertaking to discover the extent of hook worm infection in the southern coal fields.

His report will be awaited with keen interest.

T. W. A.

ADDITIONAL PERSONALS.

We are sorry to state that Dr. J. D. Barry is quite ill at the Phipps Sanatorium.

Dr. and Mrs. Albert H. Cordier of Kansas City are spending the summer at Manitou.

Dr. O. H. Bonner has returned to Rocky Ford from two months' sojourn to the Pacific coast.

Dr. E. Stuver delivered a lecture upon the "Use of Alcohol in Medicine" at the Boulder Chautauqua, July 24th.

Dr. L. C. Wollenweber of Englewood has taken down town offices with Dr. Macomber at 1415 Welton street.

Dr. W. J. Fairfield has taken offices in the First Avenue Hotel building, corner of Broadway and First avenue.

We are pleased to note that Dr. Elmer E. Bartelt of Lamar has recovered his health and is again in active practice.

Dr. H. O. Dodge of Boulder visited his son, Dr. Horace Dodge of Steamboat Springs, the latter part of July.

A card from Dr. Matt R. Root, dated at Berlin, July 18, states that he "had a nice visit with Dr. Hawkins in France."

Dr. A. A. Coleman of Rocky Ford spent the latter part of July with some friends in a "prairie schooner" outing to La Veta.

Dr. R. W. King took charge of the practice of Dr. Espey of Trinidad for a fortnight in July, while Dr. Espey was away on a vacation.

Dr. Charles O. Petty of Beaver Crossing, Neb., spent the latter part of July in Den-

ver, doing post-graduate work in ophthalmology.

The Rock Island surgeons are to meet at the Congress hotel, Pueblo, August 14-16. Dr. A. L. Fugard has charge of the entertainment program.

Dr. L. Webster Fox of Philadelphia is taking a short vacation in Denver and Estes Park. Dr. Fox is a classmate of his fellow ophthalmologist, Dr. D. H. Coover.

MEDICAL PROGRESS

Local Anesthesia About the Anus. For minor operations in this region Kenneth K. MacAlpine (May Post-Graduate) is strongly in favor of a one per cent solution of quinin and urea hydrochlorid, since it produces prolonged anesthesia, lasting several days to a week. It should be injected very slowly, one or two drops at a time (without removing needle) every minute until the anesthesia is complete.

The Relation of Gastric Motility to Acidity. A. E. Austin (Medical Record, June 8th) has been making a clinical study of this subject, and his conclusions coincide with those of Cohnheim, Krelid and Mueller and Lefmann to the effect that lowered motility is usually the primary factor, and hyperchlorhydria the secondary. The practical inference then, he says, is that alkalies and belladonna only relieve the symptoms in these high acidities, and that we must direct our attention to the underlying cause, impaired motility, and employ the limited means in our power to hasten the emptying of the stomach. Small, frequent meals, hydrotherapeutic measures, nux vomica, massage and possibly faradization and postural treatment (lying on right side after meals), have aided the author more in the treatment of gastric hyperacidity, not fermentative, than alkalies and agencies limiting secretion. As fats delay the emptying of the stomach, oil should never be employed, he says, except in cases in which examination has shown a pyloric narrowing.

Neosalvarsan. Illustrating the truth that seldom does a new remedy, a novel operation or a recent laboratory test reach perfection in its first presentation, we note that Ehrlich has improved upon salvarsan ("606") by preparing the new derivative, neosalvarsan ("914"), through a condensa-

tion of formaldehysulphoxyl acid sodium with salvarsan (New York Medical Journal). Neosalvarsan has the great superiority over salvarsan of being neutral in reaction and readily soluble. It is administered intravenously and intramuscularly in doses half again as large as of salvarsan. A strong man should receive in seven days four injections, amounting altogether to six grams of neosalvarsan.

Pituitrin as a Styptic in Gynecology. The extract of the hypophysis, known as pituitrin, is coming into common use as an oxytocic and hemostatic in obstetric work. Bab (quoted in Progressive Medicine) has seen 28 out of 30 cases of hemorrhage due to metritis, endometritis or adnexal inflammation, cease entirely, often within a day or two, after the intramuscular administration of pituitrin, even when ergot, hydrastis, stypticin and other drugs had been tried in vain. Many of the cases were unusually severe, the patient having been bleeding for several weeks before admission. The usual dose given of the pituitrin was 2 or 3 cc. of pituitrin solution; repeating the injection on several successive days, if necessary.

Concerning Pie. Count that day lost on which we eat no pie! So say all true Americans. Dr. Sajous, the erudite editor of the New York Medical Journal, writes, *inter alia*: "In its proper place, pie is not only a palatable but a nutritious staple, an excellent vehicle of carbohydrates and fruit. It is not essentially indigestible, and demands only proper mastication and insalivation to insure lack of discomfort after its ingestion. * * * * Pie has been credited with indigestibility, because of its usual place in the menu. It is eaten generally after a meal which has already furnished complete nourishment. * * * * If a

piece of cheese, almost pure protein, is added, there is a complete meal in itself, too frequently a superfluous one. Pie and cheese, supplying all the necessary elements of nutrition, make by themselves an admirable luncheon for a business man or other worker. * * * But no physician need eliminate pie from the diet list of any patient to whom he allows fats and starches, if he will but counsel judicious mastication, and call the patient's attention to its highly nutritious qualities, which demand that it be led up to by great moderation in the earlier courses of the meal of which it thus becomes the crown and glory." The above strikes us as being very sensible. However, one should not forget La Rochefoucauld's bon mot: "We hardly find any persons of good sense, save those who agree with us."

Pathogenesis of Arteriosclerosis. The editor of the New York Medical Journal (June 1, 1912) shows how the problem has been gradually elucidated, leading to the conception that "any poison capable of sufficiently stimulating the adrenals during a prolonged period can awaken the disease through these organs." The experimental production of arteriosclerosis by Josue, through hypodermic injections of adrenalin has been repeated by numerous investigators. The recent discovery of Cannon, Aub and Binger that nicotine in small doses (0.0035 to 0.0075 gm. in cats) augments the adrenal secretion, indicates the reason of the etiologic role of excessive smoking in arteriosclerosis. Hard work (found by Thayer to be a causative factor in 62 per cent of cases) was shown by Abelous and Langlois, 20 years ago, to cause overaction of the adrenals in order to destroy the waste products of muscular activity. The febrile infections (Gilbert, Petit, Wybaux) likewise produce overactivity of the adrenals and predispose to arteriosclerosis. Councilman has demonstrated that in the circumscribed or nodular variety of arteriosclerosis the primary alteration consists in a degeneration or a local infiltration about the vasa vasorum. Sajous, in conclusion, reminds us that the arterioles, whose calibre is reduced or obliterated by an excess of adrenal secretion, are the terminal arteries from which the vasa vasorum receive their blood to nourish the coats of the

larger arteries; hence, the arterial coats are deprived of sufficient arterial blood to sustain life, and local tissue necrosis (degeneration, sclerosis) occurs.

Treatment of Baldness. The editor of the Medical Council says that a dirty scalp is by far the most frequent cause of baldness, systemic diseases (syphilis) and lack of blood supply (arteriosclerosis) coming next. "After all, the only efficacious preventive treatment of baldness is cleanliness, and the application of proper means for promoting the free supply of blood to the part." He recommends trying Bier's passive hyperemia, treating the anemic spots with the suction pump, rubbings and electricity. For cleansing the scalp he has found nothing better than redistilled crude kerosene, rubbing a few drops into the scalp and following with a hot shampoo, about every two weeks. If a more elegant preparation is desired we may use resorcin (better the monoacetate of resorcin), 5 grains to the ounce of alcohol, adding to each ounce 5 to 10 drops of castor oil and a drop of oil of rosemary. The hair should be trimmed and singed frequently, rubbing in vaselin or coconut oil afterward. A wire brush, dampened in hot water, gives good friction. "Deep breathing, proper exercise and attention to the general rules of hygiene must never be forgotten."

A Good Word for Coffee. Years ago Moleschott declared that the use of tea and coffee served to retard tissue waste—in short, they were the "savings banks" of the system. The latest study in this direction (American Food Journal) has been done by Dr. H. L. Hollingworth of Columbia University, who conducted a forty days' experiment with a "poison squad" of sixteen. According to Dr. Hollingworth, caffeine is the one known stimulant which quickens the functions of the human body without subsequent depression. His explanation of this curious fact is that "caffeine acts as a lubricator for the nervous system, having the actual physical action whereby the nerves are enabled to do their work more easily. Other stimulants act on the nerves themselves, causing a waste of energy, and consequently, according to nature's law, a period of depression follows, and the whole process tends to injure the human machine.

(Continued on Page 98)

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COMMON SENSE STILL APPLICABLE TO MEDICAL EDUCATION.

The editor of the Maryland Medical Journal (June issue) makes the following apropos remarks concerning the preposterous standards now required of medical students in this country. Arthur Dean Bevan's article, to which he refers, appeared in the March American Medical Association Bulletin, educational number:

"Doctor Bevan states that a general agreement has been reached both here and abroad as to what constitutes a minimum preliminary requirement for medical study. It is: The student should possess a good primary and secondary school education. If the boy enters the primary school at six he will graduate from the secondary school at eighteen or nineteen. He should have, in addition to this, a sufficient knowl-

edge of chemistry, physics, biology, to enable him intelligently to begin his medical studies. In Canada, England and Germany this additional preliminary training can be obtained in one year of work either in the medical school or in the science department of a university. Then follows four years of medical studies proper and a year or more of hospital internship. According to Doctor Bevan the Council on Medical Education believes that one year of hospital service should be required before the graduate is permitted to engage independently in practice. To our way of thinking, Dr. Bevan has struck the happy medium in medical education. If Germany, the recognized leader in medical thought today, can produce the men she does without such stringent requirements, there is something radically wrong with our meth-

ods. There is no doubt but that America is suffering from too much pedagogical pedantry. Non-medical educators to a large extent have set the standards, and every school not reaching is considered behind the times, run for commercial purposes, and a menace to the country. Those schools of the extremely rigid requirements in many instances have non-medical men occupying many of their laboratory chairs, or medical graduates who have never practiced. What practical knowledge has either of these classes concerning student needs? As a rule they teach pure science, and this applies especially to the non-medical teacher. The student of medicine is not after pure science; he is after what is essential and necessary for him to engage intelligently in the practice of medicine. We believe with Dr. Bevan that any system which holds its students until their average age at graduation is 26 or 27 years is imposing an unjust burden upon the student, and especially so when pecuniary returns after this long period of apprenticeship are taken into consideration. Indeed, as Dr. Bevan states, it is nothing short of a crime committed under the guise of the interests of higher education. Then, too, from the standpoint of efficiency, it is undesirable."

NEURASTHENIA AND THE DUCTLESS GLANDS.

The dependence of certain neuroses upon errors of the internal secretion of the ductless glands, is clearly enunciated in an interesting article by M. Allen Starr (Medical Record, June 29).

Neurotic symptoms suggestive of myxedema, and curable by thyroid extract, are sluggish thought, mental depression and inertia, day drowsiness, peculiar dryness of skin (rough and scaly, as if powdered), and hair (falls out from axillae and pubic region; sometimes abnormal growth in front

of ear or on face), constant coldness, often swelling of mucous membrane of nose and throat, progressive gain in weight, pseudorheumatic pains in muscles and bones and a great sense of physical exhaustion without any objective signs of heart weakness. The ordinary treatment of such neurasthenics is greatly aided by the addition of small amounts of thyroid extract (usually one grain two or three times a day) to the patient's food, giving the medicine for ten days or so, then omitting a week.

The very active mentality, nervous excitability, muscular irritability, tachycardia and tremor of latent or manifest Basedow's disease, are generally admitted to be due to an excessive thyroid secretion. Such patients often complain of a burning sensation of the body and of excessive perspiration and diarrhea. In hyperthyroidistic neurasthenia Starr recommends belladonna, hydrastis, rodagen, thyroidection, ergot, bromid, and the application of ice to the thyroid for half an hour three or four times a day.

Excessive pituitary secretion leads to gigantism or acromegaly; deficient secretion, to a very great increase of body fat, a craving for sweets, subnormal temperature, slow pulse, dry skin, loss of hair, sexual infantilism and total lack of ambition. Courses of pituitary extract or of small doses of thyroid extract may do good.

For the neurosis of the menopause the administration of thyroid extract in small doses for a long period of time is indicated if there is cessation of the function of the thyroid, shown by accumulation of fat, a sluggish state of metabolism, mental depression and partial dementia. If when the ovaries cease to perform their function, there is compensatory hypersecretion of the thyroid, leading to the sense of heat, flushes, rapid pulse and mental irritation, lutein or ovarian extract should be given continuously for many weeks.

OCCUPATIONAL POISONING.

Nearly all manufacturing processes are attended with dangers of poisoning in some manner through the nose, the hands and mouth, or rarely the skin. The nervous and circulatory systems are affected most injuriously. Lead poisoning among smeltermen and others is much the most frequent form of occupational poisoning in Colorado.

Dr. W. Gilman Thompson recently gave a brief address upon occupational poisoning in chemical trades before the New York Section of the American Chemical Society (June Journal of Industrial and Engineering Chemistry), which was an interesting resume of the subject, and which was founded largely on the author's personal observations at the dispensary of the Cornell Medical College, the Bellevue Hospital clinics, and in the Presbyterian Hospital wards.

In the records of these three institutions during the past eight years there were recorded 283 cases of serious chronic lead poisoning, in most of which there was total incapacity for work lasting for months or years. Some of these patients had lead colic, and the greater number showed hardening of the arteries. Some acquired chronic Bright's disease, and practically all suffered from anemia, digestive disorders and muscular weakness. A youth of 23, who had been employed for eight years as a helper in a paint manufactory, had the hardened arteries of an octogenarian, a greatly enlarged heart, diseased kidneys, and difficult breathing. Illustrating the careless environment of industrial conditions in this country. Dr. Alice Hamilton, in a report on the white and red lead industry for the U. S. Department of Labor, found in 1910 one case of poisoning among seven employes, whereas in England the ratio was 1 in 264. There are at least 150 different trades in which lead constitutes a serious hazard.

Dr. Thompson has seen complete par-

alysis from arsenical neuritis, and a man employed in mixing Paris green paint came recently to his clinic with a diffuse brownish black pigmentation, due to occupation. There are 27 trades in which arsenic is the chief poison to be feared, though owing to the lessened use of arsenical pigments in wall papers and artificial flowers, the total number of cases of arsenical poisoning has been considerably reduced.

The chemist of a chrome works once came to the author's clinic with a perforated ulcer between the two nasal cavities large enough to admit the forefinger; also with round, depressed ulcers or "chrome holes" on his hands. Of 40 workmen employed in the same works, all but four had chronic inflammation in the nose, and half of them showed perforation of the nasal septum. Chronic acid ulcers are very slow in healing, and may incapacitate a workman for months.

The symptoms somewhat simulating malaria, except that fever is absent, sometimes known as "brass founders' ague" and seen among moulders and other workers in brass, have been attributed chiefly to the zinc in the brass. Brass filings, if inhaled in a dusty workroom, may give rise to fibroid phthisis.

Mercury poisoning, formerly common among mirror makers, has been diminished in frequency by the extensive substitution of silver for the former metal. In the manufacture of felt hats, however, mercury is volatilized in a process of hot pressing, the fumes producing among the hatters mouth ulcers, jaw necrosis, anemia, debility, and serious digestive disturbances.

In Europe the red phosphorus or safety matches are manufactured exclusively, and the same law will soon be enforced in this country, since the white phosphorus is very dangerous to match-makers. The fumes cause decay of teeth and rapidly progressing ulceration and destruction of the jaw bone,

which must be wholly or partially removed to save the patient's life.

The vapors of wood alcohol, used as a solvent for varnish, may lead to acute poisoning, causing permanent blindness, and not infrequently sudden death by paralysis of the heart. A number of fatal cases have been reported in New York City. Three men in Buffalo lately went down into a large beer vat to varnish it and were overcome by the wood alcohol vapor, with the result that two of them died and one became permanently blind.

The chief lessons to be learned from

these facts are: the need of a campaign of education, particularly among physicians doing work for large industrial corporations; the encouragement of chemists in devising new and less toxic methods of manufacture, such as the substitution in France of zinc for lead white; the instruction of manufacturers and employes in better modes of sanitation and ventilation; the use of warning labels on cans and bottles whose contents are used by workmen; and the periodic examination (at least once a month) by physicians of workmen using dangerous chemicals, in order to detect incipient cases of poisoning.

PERSONALS

By the Editor and Associate Editors.

Dr. T. E. Carmody has been "laid up" with a severe synovitis.

Dr. Albert E. Smith was away in the Utah during a large portion of July.

Dr. R. W. Corwin recently spent a fortnight in Chicago and other eastern points.

Dr. and Mrs. R. E. Wolfe, of Rocky Ford, are the proud parents of a fine baby boy.

Dr. F. R. Slopansky of Helper, Utah, was a visitor in Denver in the latter part of July.

Dr. M. J. Waldron and Dr. S. B. Eichberg have recently undergone appendicectomies.

Dr. R. W. King has taken offices with Dr. O. S. Fowler at 624 Metropolitan Building.

Dr. Edwin Lewis of Sedgwick spent some days in Denver during the latter part of July.

Dr. Charles H. Brunswick was operated successfully for strangulated hernia, July 21st.

Dr. and Mrs. Frederick A. Faust have returned to Colorado from their European trip.

Dr. J. J. Rosenberg of Portland, Oregon, visited home folks in Denver the fourth week of July.

Dr. T. E. Taylor is a candidate for lieutenant governor of Colorado on the Prohibition ticket.

Dr. and Mrs. E. L. Foster, of Arvada, have returned home from a pleasant trip in Missouri.

Dr. and Mrs. Wm. H. Buchtel have returned to Denver, after three months' absence in Europe.

The American Chemical Society now has 6,100 members, and is the largest society of its kind in the world.

Dr. H. Grieger of Englewood has recovered from a serious infection supervening on an intranasal operation.

Dr. Rudolph Albi has removed his offices to 314 Central Savings Bank Building; hours, 10 to 12, 3 to 5 and 7 to 8.

Dr. Zdenko von Dworzak has removed from the California Building to the second floor of the Metropolitan Building.

Under the emblem of the stork, Dr. and Mrs. H. W. Rower announce the birth of Miss Gladys Rower on July 12, 1912.

Dr. George E. Neuhaus's down-town office is now at 446 Metropolitan Building; hours, 11 a. m. to 12 m. and by appointment.

Dr. B. L. Jefferson has thrown his sombrero into the ring as a candidate for the Democratic governorship of Colorado.

Dr. H. H. Martin is remodeling his residence. We regret to learn that Dr. Martin's son has been very ill with typhoid fever.

Dr. Madison J. Keeney has returned to his practice in Pueblo, after a month's vacation in Chicago and Excelsior Springs.

Dr. Casey Wood, the noted Chicago oculist, lectured at the summer ophthalmologic course of the Denver Medical School, July 26th.

Dr. and Mrs. Wm. J. Rothwell have returned to Denver from a pleasant month's

outing, visiting friends and relatives in Canada.

Dr. W. A. De Beque, founder of the town of De Beque and a pioneer Colorado physician, is the father of a bouncing baby boy. Congratulations!

Our old friend and fellow citizen, Dr. Carl Johnson, who left Colorado because of ill health, is now located in the Merchants' Trust Building, Los Angeles.

We are glad to note that Dr. I. B. Perkins' daughter, who was recently operated by himself (at her demand) for appendicitis, has made an uneventful recovery.

We are pleased to learn that Dr. C. E. Tennant's intestinal anastomosis clamps are being accorded a warm recognition in Europe as well as in this country.

Because of indisposition on the part of the father, Major Charles E. Locke and Dr. John Galen Locke have returned to Denver from Europe, without making their anticipated tour of the Orient.

Dr. Rose Kidd Beere, superintendent of the county hospital, generously entertained the internes and their young ladies with a dinner and theater party at Elitch's on the evening of July 11th.

Dr. H. G. Maul, the busy pathologist of the Nebraska State Hospital at Ingleside, anticipates making an extended trip in the East this fall and doing some post-graduate study in pathology, radiography and serum diagnosis.

In a recent communication from Dr. J. Tracy Melvin, who is now located at Porterville, Cal., in the great early orange district, the doctor wishes to be remembered to his Denver friends, whom he considers a "fine bunch."

We note with pleasure that Dr. W. S. Bogart of Denver presented a paper upon "Some Ethical, Financial and Physical Phases of Life Insurance Examinations" before the recent annual conclave of the National Eclectic Medical Association in Washington, D. C.

The daily papers report that Dr. L. O. Stadler, who has been in Ouray for twenty years, was recently arrested on the charge of selling cocaine to a young man. Thus our nebulous friend "Ethics" is again knocked into a "cocked hat." Read Matthew, 23rd Chapter, Verse 24, and meditate.

At the recent annual meeting of the American Proctologic Society, the following

officers were elected: President, Dr. Louis J. Hirschman of Detroit; Vice-President, Dr. Alois B. Graham of Indianapolis; Secretary-Treasurer, Dr. Lewis H. Adler, Jr., of Philadelphia; Executive Council, Drs. John L. Jelks, Louis J. Hirschman, J. Rawson Pennington and Louis H. Adler, Jr.

The annual first aid contest in Colorado held at Walsenburg, July 13, under the auspices of the Victor-American Fuel Company, was characterized by an unusual amount of interest throughout the southern coal district, being attended by several thousand persons. Drs. J. W. Ames, H. G. Garwood and L. W. Cole, U. S. A., officiated as judges in this contest, and awarded the first prize (a silver loving cup) to the team from Maitland.

Dr. P. Alacan, professor of pharmacology at the University of Havana, is recreating in Colorado with his family on his usual sabbatical year of leave. In company with his assistant, Dr. Ramirez, he will attend the meeting of the American Pharmaceutical Association, to be held in Denver, August 19-21. Dr. Alacan is an old friend of Dr. J. W. Ames of this city, the two having been associated in the yellow fever campaign in Cuba in 1906-1909.

Our friend, Dr. Leon G. Woodford, who is well known in this city, has been located for some time in Everett, Washington. He is enjoying a good share of prosperity, but says that life would be incomplete without the Denver Medical Times, so like a good, sensible man, he forwards us his subscription. Dr. Woodford is the city health officer. Everett has been selected for the meeting of the Washington State Medical Society for 1913. There are about 25,000 people in the city and it is a growing and progressive place. More success to the good doctor is what we say.

Most deplorable was the accident which caused the death of Dr. and Mrs. J. C. Hutchison in Elk Canon of the Platte Basin, July 9th. The doctor's auto seems to have slid backward down a steep ascent, striking a bridge at the bottom and overturning into an irrigating ditch, killing both of the occupants instantly, it is thought. Dr. Hutchison was born in Maryland in 1864. He was a graduate of the Maryland Medical College, and had practiced in Denver ten years, his work being largely obstetric, in association with Dr. T. Mitchell Burns. He was

a good physician and every inch a man. Three children mourn the untimely loss of mother and father.

RESOLUTIONS BY THE MEDICAL SOCIETY OF THE CITY AND COUNTY OF DENVER, CONCERNING THE DEATH OF DR. J. C. HUTCHISON.

Probably never before in its history has this society been so shocked by the death of one of its members, as when, on Tuesday, the afternoon of July 9th, news came to us that Dr. and Mrs. J. C. Hutchison had been killed while out for recreation in the foothills in their automobile.

Words are inadequate to portray the absolutely appalling tragedy of this instance of the hands of death, reaching out from eternity, and snatching from our midst one of our members, while in the very full bloom of his manhood and life's work.

In the presence of such an overwhelming

calamity, we are struck dumb with awe and grief, and while we may endeavor to extend to the bereaved family and relatives some degree of condolence, yet we feel that our loss is scarcely less than theirs.

To attempt to enumerate the kindly attributes of one whose life was so full of unbiased good will toward his fellow men, seems but a hollow mockery.

Dr. Hutchison was a kind and loving father, whose whole being was bound up in his family; he was an energetic worker in all his various professional associations, and a citizen whose broad activities along right lines were such as to make any community proud of him.

Be it therefore resolved by the Medical Society of the City and County of Denver, that, in the death of Dr. Hutchison we have sustained an irreparable loss.

C. A. FERRIS,
C. B. VAN ZANT,
G. L. MONSON,
Committee.

FOREIGN JOURNALS

(Translations by Dr. Joseph Cuneo,
Denver, Colo.)

Gastro-Enterostomy Taking Precedence of Physiology, Laboratory and Clinic. (La gastro-enterotomia ante la Fisiologia, el Laboratorio y la Clínica). La Revista de Medicina y Cirujía practicas, de Madrid, publishes in the numbers of October and November a study by Dr. R. Y. Alaytua worthy of calling the physicians' and surgeons' attention. Those last ones will find themselves handled a little roughly; it will be at least a warning to them, because right from the first page Dr. R. Y. Alaytua refuses to subscribe, without reserve, to the enthusiastic eulogy of the modern surgeon made by Delageniere, at the opening of the 23rd Surgical Congress, of which he was president. In regard to the physicians, they will smile, without being of the same opinion, at the recollection of the French motto, "glorious as a vain barber," as to which Dr. Alaytua thinks that he can make the epitaph. Oh! the ugly word! I meant the epilogue of a certain auto-tauto enthusiastic eulogy of the modern surgeon made by M. Delageniere, in which the rather annoying exaggerations of the form must not

prevent us from recognizing an important part of truth.

Everyone will read with pleasure the excellent resume of the recent acquisitions, particularly from physiology's standpoint, concerning the kinds of gastro-intestinal-jejunal amastomosis. It will be seen how in some 40 or 50 pages the author succeeds in rendering justice to audacious affirmations presuming to make out of gastro-enterostomy "the ideal operation that answers to all the indications (Guinard), and permits one to say to those who have submitted themselves to it: "Go! You are operated and cured! Walk and eat!"

The surgical procedure in such a case represents 'but a stage of the medical treatment of the diseases of the stomach, and is unable to successfully influence the mucuous lesions, the chemical hyperactivity; able only to establish for a time the evacuating action and that not in its full integrity.

Although the operation "ideal" ultimates in a poor result, it is nevertheless an indispensable operation. Can we place hope

in pylorotomy? In the transposition of the duodenum? The author leaves to the future the answer, satisfied for the present to recall to its just valuation this so praised gastro-enterostomy operation, and which is so roughly handled by the fine sarcastic pen of Dr. R. L. Alaytua. (*Le Progres Medical*, Paris, April 27, 1912).

Heliotherapy at a high altitude in the treatment of external surgical tuberculosis. (Armand, Lyon's thesis, 1911-1912, No. 7). The results of heliotherapy at a high altitude in the treatment of external tubercular affections seem remarkable. They are characterized by disappearance of pains at

the first sun treatment; the rapid reconstruction of the general condition; repression of cold abscess, as a rule, in a few months; the cicatrization of the deep lesions in the shortest time, with restoration of the normal functions of the affected parts; especially interesting results in arthritis, that frequently recovers, leaving the free movement of the joint with a minimum of muscular atrophy of the limb. It is understood that the method does not exclude surgical intervention, the indications for which remain for discussion; fortunately they associate themselves in helping the course of convalescence. (*Le Progres Medical*, Paris, April 27, 1912).

BOOKS

Laboratory Methods, With Special Reference to the Needs of the General Practitioner. By B. G. R. Williams, M. D., and E. G. C. Williams, M. D. With an introduction by Victor C. Vaughan, M. D., LL. D. Illustrated with 43 engravings. Price, \$2. St. Louis: C. V. Mosby Company, 1912.

The reviewer has read this book through with interest and profit. It is surely an excellent guide for the general practitioner, and, like every genuine contribution to science, presents new points of view even for experienced laboratory workers. Within the space of 200 octavo pages the authors have condensed a great amount of serviceable information, including (in addition to urine, sputum, gastric juice, etc.), a chapter on the detection of common poisons, one on simple water analysis, and another on the technic of the private post mortem. Physicians and surgeons who have the time and inclination to do their own laboratory work will find this book well adapted to their needs.

E. C. H.

Progressive Medicine. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart A. Hare, M. D., Philadelphia, assisted by Leighton F. Appleman, M. D., Philadelphia. June 1, 1912. Lea & Febiger, Philadelphia and New York. Six dollars per annum.

In this volume William B. Coley contributes his annual digest of hernia, with numerous illustrations. John C. A. Gerster gives a full section on surgery of the abdomen, exclusive of hernia. This section is also well illustrated. Under "Gynecology,"

John G. Clark pays special attention to cancer and fibroid tumor of the uterus, relaxation of the sacroiliac joint and various operative methods. Alfred Stengel gives an authoritative summary of progress in diseases of the blood, gout, diabetes and exophthalmic goitre. Edward Jackson presents his usual excellent resume of the important literature of the past year on ophthalmology.

E. C. H.

Surgery of Deformities of the Face, Including Cleft Palate. By John B. Roberts, A. M., M. D., Professor of Surgery in Philadelphia Polyclinic, Surgeon to the Methodist Hospital; formerly Assistant Eye and Ear Surgeon to the Children's Hospital, and Demonstrator of Anatomy in the Philadelphia Dental College. Illustrated with 273 Figures. William Wood & Company, New York, 1912.

This treatise by the well known instructor and surgeon on this interesting and developing field of surgical endeavor, is well and interestingly presented. Beginning with the early history of this subject, in the 16th century, which seems to have had its origin in rhinoplasty, an outgrowth of the common deformity seen in Asiatic countries, especially India, where noses were commonly severed as a punishment, he pays a well deserved tribute to pioneers in this field, making special mention of the American surgeon, Thomas D. Mütter.

Passing to the survey of the anatomy of the face, he pays especial attention to the principal important structures, blood and nerve supply and distribution and the

causes predisposing to deformities of the face; discusses fully the action of the muscles of expression, and the important relation of same to surgical procedures of the face.

The author treats thoroughly of all the deformities of the face, mouth and palate, including much that might come under specialties of the eye, nose, throat and dentistry, but which can well be included in a specialty of surgery of the face and palate.

Many physicians, as well as laymen, do not fully realize the present possibilities of relief of facial deformities. The subject is thoroughly covered in every department, and is a treatise well worth consulting by all interested in this line of surgical endeavor. The book is profusely illustrated.

H. S. S.

Modern Methods in Nursing. By Georgiana J. Sanders, formerly Superintendent of Nurses at the Massachusetts General Hospital, Boston. 12 mo. of 881 pages, with 228 illustrations. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, \$2.50 net.

The 880 pages of Miss Sanders' *Modern Methods in Nursing* may at first seem rather formidable as a nurse's text book, but the type and the many illustrations make it altogether readable.

If the introductory chapter could be read by every girl who is drawn towards nursing as a life work, fewer mistakes would be made.

This book touches on all subjects directly relating to nursing, and further attempts to give some understanding of bacteriology and the newer teachings regarding immunity and the opsonic theory, without those technicalities which affright the nurse student.

Not only does this book touch a score of subjects of vital interest to the undergraduate nurse, but it will serve as a reference book for the graduate, whether she is doing private or hospital work.

Both the arrangement of subjects and the manner of their presentation show Miss Sanders' wide experience and her appreciation of the nurse's need.

M. E. V. F.

Differential Diagnosis. Presented through an Analysis of 385 cases. By Richard C. Cabot, M. D., Assistant Professor of Clinical Medicine, Harvard Medical School. Second Edition. Octavo of 764 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, \$5.50 net.

The popularity of this work was shown by the fact that a second edition was required in less than a year. The work presents, in a convenient form, the essentials

of differential diagnosis, both clinical and laboratory. The author proposes to study medicine by the case-history method. Each section is prefaced by a statement of possible causes of the symptoms under discussion. Illustrative cases are given, with history; examination and laboratory findings are given, differential diagnosis discussed and diagnosis made. A great many plates showing the distribution of pain, physical findings, etc., accompany the case histories. Diagrams are given, showing the relative frequency of the several diseases in which any one symptom may be the principal complaint. The value of this work is that it demonstrates to the reader the manner in which he may arrive at a reasonable diagnosis by careful observation and proper study of the factors obtained from the history, physical examination and laboratory findings. The work is well supplied with helpful illustrations.

W. E. S.

Health and Medical Inspection of School Children. By Walter S. Cornell, M. D. Cloth, 614 pages, 200 illustrations. Price \$3.00. Published by F. A. Davis Company, Philadelphia, Pa., 1912.

Dr. Cornell, who is medical inspector of public schools in Philadelphia, lecturer on child hygiene in the University of Pennsylvania, director of Division of Research, New Jersey Training School for the Feeble Minded, etc., has given us a very clear, practical and useful book, which has the rather unusual merit of being presented in an interesting and at the same time thorough manner.

The work is divided into three parts, viz.: 1. Medical Inspection—This gives a clear and logical outline of the subject and occupies 152 pages. 2. Hygiene—This is an admirable description of school sanitation, ventilation, fresh air classes and a most excellent outline for physical education. 3. Defects and Diseases—This occupies over 400 pages, or the body of the work, and is a very fine discussion of the following affections; viz.: 1, The Eye; 2, The Nose and Throat; 3, The Ear; 4, The Teeth; 5, The Nervous System; 6, Mental Deficiency; 7, The Skeleton; 8, Nutrition; 9, The Skin; 10, Speech; 11, Infectious Diseases; 12, The Prevalence of Defects and Diseases.

Dr. Cornell has discussed the whole subject in a calm and judicial manner and has thrown a flood of light as well as given a great deal of very valuable advice on these important subjects. The book should be read by every physician, school teacher and intelligent parent. The illustrations, paper and type are good and a credit to the publishers.

E. STUVER.

UTAH SECTION

Denver Medical Times and Utah Medical Journal

Address all articles, personals, items of interest, and books for review, intended for the Utah Section, to the Editor, Frederic Clift, M.D., Ogden, Utah.

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HEALTH PLANKS IN 1912.

Physicians and Scientists are more or less neutral in politics—but the time is at hand when they must follow up their scientific teachings by decisive action. The Republican party has gone back on their previous records. Roosevelt and Taft, in their public utterances, have both favored a Department of Public Health, but Taft's friends who controlled the Chicago Convention limit themselves to one ambiguous sentence of twenty-three (hoodoo) words, as follows: "It (the Republican party) will strive not only in the Nation, but in the several States, to enact the necessary legislation to safeguard the public health." It looks as if for four years or more the Republican party has been hoodooing the medical profession into a belief that they were sincere in their efforts to pass the Public Health Bills introduced into the Senate, where the party has had a clear working majority, but each Bill has failed to receive sufficient support from those in power and has been dropped or left over and in the following session bills have been reintroduced, each with its strongest clauses cut out, until now the Republicans, through Senator Smoot, have introduced further amendments by way of a substitute bill, emasculating almost every principle heretofore fought for by the profession. It sidetracks the Owen Bill, by extending the scope of the Public Health and Marine Hospital Service, and continues it in charge of the Surgeon General, as now provided by law and regulations of the existing Marine Hospital Service with Assistant Surgeon Generals, thus making Civic National Public Health an appendage to the Navy and Army and subservient to Naval and Military officers.

The medical profession believes that the health of the Civil population of these United States will best be protected by a non-military "Director of Health to be appointed by the President with the consent of the Senate, for a term of six years," as provided for in the Owen Bill, and that the Owen Bill will best safeguard the civic interests of the people of this and the other States. We want no military caste or oligarchy in this country, such as controls the civil population of Germany, Russia, Austria, Italy and France—and for this, not to mention the many other reasons, we strongly denounce the Smoot amendments to the Owen Bill.

The medical profession is not satisfied with the 23 ambiguous words jumbled together into the so-called Republican Health Plank of 1912. It is a direct call to arms of the 33,000 odd members of the American Medical Association. Whatever politics may be individually professed by these 33,000 physicians and by the members of the profession not associated with the A. M. A., we urge them not only to vote, but to see to it that their patients support the party who have put forth a straight, out and out statement of their attitude towards this, the greatest of all public questions—the public health of the civil population of these United States in their homes—not in the far-away garrisons of Manila, Porto Rico and Panama.

DEMOCRATIC HEALTH PLANK FOR 1912.

"We reaffirm our previous declarations advocating the union and strengthening of the various governmental agencies relating to pure foods, quarantine, vital statistics, and human health. Thus united and administered without partiality to or discrimination against any school of medicine or system of healing, they would constitute a single health service, not subordinated to any commercial or financial interests, but devoted exclusively to the conservation of human life and efficiency. Moreover, this health service should co-operate with the health agencies of our various States and cities without interference with their prerogatives or with the freedom of individuals to employ such medical or hygienic aid as they may see fit."

This sounds more like acquiescence in the demands of the American Medical profession. In this plank the Democrats made a specific promise—there is no ambiguity—

"When thou sittest to eat with a ruler, consider diligently what is set before thee."

Let us have no Surgeon Generals as Military Dictators in our civil affairs.

BEWARE.**Prostitution—Unnatural Crimes...**

"Ignorance is never bliss. It is always pitiful, cowardly or criminal. He that deserves the truth can bear it, and whoso can't bear it should be broken by it as kindly, but as quickly, possible. What you know is not yours to keep; it is yours only kindly, but as quickly, as possible. What you to give away."

Prostitution is not regarded in civilized countries as a crime—it is usually classed as a misdemeanor—whereas civilized codes of law treat unnatural offenses as crimes to be punished by exemplary punishment. We know that the Almighty blotted out the twin Cities of the Plain for their "unnatural crimes," but nowhere do we find that prostitution is visited with any severe punishment. Even Judah, who prostituted his daughter-in-law, was not punished. David was punished for his treachery in compassing the death of Uriah—not for his prostituting Bathsheba.

It has been said that there is nothing new under the sun, and reading between the lines, it has been suggested that the extremists or ultra-moralist of Sodam and Gomorrah had brought about the abolition of prostitution in their "bailiwicks." In Gen. 19, we read of the visit of the two male angels—some say there is neither male or female in the "better land"—to Sodam, who were entertained by Lot, and after they had eaten, "but before they lay down, the men of Sodam compassed the house round, both young and old, all the people from every quarter, and they called unto Lot and said unto him—where are the men that came in to thee this night? bring them out unto us that we may know them." And he said, "I pray you, my brethren, do not so wickedly. Behold, now I have two daughters that have not known men, let me, I pray you, bring

them out unto you, and do ye to them as is good in your eyes, only unto these men do nothing, forasmuch as they are come under the shadow of my roof." St. Paul, in his Epistle to the Romans, writes, "Wherefore God gave them (the inhabitants of Rome) up in the lusts of their hearts unto uncleanness that their bodies should be dishonored among themselves. For this cause God gave them up unto vile passions; for their women changed the natural use into that which is against nature, and likewise also the men, leaving the natural use of the women burned in their lusts one towards another—men with men working that which is unseemly, and receiving in themselves that recompense of their error which was meet." probably Syphilis and Gonorrhea.

We ask our citizens to avoid extremes. We urge our civic authorities to clear our streets of clandestine and public prostitutes and pimps. Protect our boys and girls. Conceal from them as long as possible the fact that their seniors are "without understanding, covenant breakers—without natural affection," but do not drive them to unnatural crimes. Rather let them hide themselves with the common prostitute in some back alley, where "dog eats dog," and where the police can control the evil doer with the least possible exposure. Let us not forget that there are those in our midst who, in their own countries, admittedly practice and submit to their crimes. Our young people read the newspapers—let them be carefully "censored" for Evil, whether personal or otherwise, is always ready to tempt the human race to see and taste for themselves. Youth is loath to accept the teachings of those to whom maturity—age—has brought experience. "Lead us not into temptation." Compel the clandestine to be good, with the alternative of being driven to the "shambles."

ARE THE DOCTOR AND HIS REMEDIES NECESSARY?

There is a certain class of people who say that there is no real necessity for the doctor, and that the agents he employs, in combatting disease, should never be used. As a rule these persons are not associated, even indirectly, with things of a medical nature, and consequently have had no experience, of a practical nature, in the handling of pathologic conditions. They say (**"THEY SAY" is usually a liar**) that the agents of the doctor are either nasty, uncleanly, or rotten. Again they say that the work of the doctor is much in the way of guess, and not based upon anything of a scientific nature, despite the fact that the doctor may not only accept the signs and symptoms offering, both subjective and objective, but in addition takes cognizance of the findings of the laboratory, and is frequently guided by the latter, both in diagnosis and treatment. They say that if man lives as he should there will be no need of the doctor. Perhaps this is a fact, but what man is there who obeys all of the laws of nature to the letter, and what man is there who is so perfect, physically, as to withstand the attack of the many organisms which are continually appearing in everything with which man comes in contact-

In order that the doctor might be eradicated from the realms of society, not only would proper living be involved, but an elaborate system of Sanitation would be required. Many of the habitations of man would necessarily have to be razed. Many of the occupations would necessarily have to either be done away with, or more machine work would be required, in that the operators might not come in contact with disease-producing substances, as it is a recognized fact that there are occupation diseases.

Many of the victims of epidemics, of recent origin, and specific in nature,

have lived cleanly lives, in spite of which it has been found that they have been unable to combat the infection or invasion of the etiologic factors of disease. This has been found to be a noteworthy fact in pellagra, hook worm disease, infantile paralysis and meningitis, as all of these diseases have affected both those who have lived cleanly lives and within the bounds of cleanly homes, as well as those who have lived in the squalor of the cabins and tenements.

Reports of cases of pellagra have shown that this disease is no respecter of persons, as the rich and poor, alike, have been affected thereby. Sanitation seems to have played but a slight part in the prevention of epidemics thereof, and even men and women of previous good health and more than average strength have succumbed to the disease. The doctor has been a necessary factor in connection with this condition, and had it not been for him it is very probably that the mortality would have been much larger. It has been he who has discovered the cause of the disease, and again it has been to him that people have turned for relief.

For years, in some of the southern states, there was a class of persons who were prone to clay eating. This was thought to be a habit, rather than a sign of any particular disease, but the observant doctor found that only those invaded by the hook worm were possessed of such vicarious appetite, and further that, if the worms were eradicated from the person possessing such appetite, no such sign was subsequently apparent. This invasion took place, regardless of the mode of living, although it must be admitted that improper sanitation favored the condition. Having discovered the reason for clay eating, the doctor cast about for a remedy which would eradicate the worms from the person so afflicted, and discovered that thymol was more ef-

fective than any other drug. Had it not been for the doctor, and his treatment of this disease which reduced the cerebral powers of the large numbers of people within the states in which the hook worm thrived, it is very probable that the disease would have gone on, year in and year out, without recognition, and would have farther reduced not only the brain, but the physical powers, as well, of the persons so afflicted, until finally but a very small percentage of the people within such districts would have been of any considerable worth to the community. The doctor may not be worth while, as a rule, but in the treatment of hook worm disease alone, he has been the means of rescuing hundreds of thousands of persons from a living death, and assisted in making them sound men and women, ready to take their proper places in the world. The doctor was a necessity in this instance.

Infantile paralysis was no respecter of persons, as the child of the rich was affected in as many instances as was that of the poor. In fact, in some of the epidemics it was a noteworthy fact that the disease appeared within the homes of the rich and well-kept with greater frequency than in the tenements. Proper living seemed to have no effect to overcome a tendency to invasion. The etiologic factor of this condition was determined by the doctor, and the mode of treatment likewise established by him, and it was through his efforts that this epidemic was stamped out, and the mortality rate reduced. Here again do we find the doctor and his remedies a necessity.

Not so very long ago, in certain sections, there appeared epidemics of meningitis, and again not only were the unsanitary the victims, but as with infantile paralysis, the rich were affected. Proper living seemed to offer no barrier to the invasion of the disease. Here again did the doctor and his remedies play an important part. It was he who discovered the cause

of the conditions, and therefrom evolved a mode of treatment, which not only cut short the course of the disease, but reduced both the mortality and number of subsequent cases. And he used a "rotten" serum to bring about a satisfactory termination, despite the fact that those who maintain that the doctor is an unnecessary evil, likewise maintain that he should not employ such agents in the treatment of disease. The doctor may not have been a necessity, but he obtained results which would not have been obtained in any other manner. **He must have been a necessity.**

A few years ago, in the city of St. Louis, there was an epidemic of typhoid fever, which was confined to a certain area of the city. In other portions of the town there was hardly a single case of the disease. Again this condition seemed to be no respecter of persons, as both the rich and poor were alike afflicted. It was the doctor who discovered the mode of infection and the reason why the disease was not apparent in other sections of the city. The infective agent was carried by milk obtained from two dairies, from which the infected area obtained its milk supply. When this condition was corrected the epidemic ceased, but not until a considerable mortality had taken place. The persons afflicted, in a considerable majority of instances, presumed that they were living properly, as their sanitary surroundings were good and they took exceptionally good care of their persons, both as to cleanliness and diet, but nevertheless they succumbed to the infection. Even though the doctor had accomplished nothing else, his discovery of the route of infection and the removal thereof, made him a necessity in this instance.

From the foregoing it is to be clearly seen that, no matter how correctly a person may live and how carefully he may be to preserve his health, he is liable to infection. He may live upon practically a vegetable diet and still

become ill through drinking polluted water or milk. He may be invaded by the many micro-organisms which are floating about in the atmosphere at all times, regardless of the fact that he may be as cleanly as is possible.

We find that many of the so-called vegetarians are prone to drink copiously of milk and eat eggs to a considerable extent. From the milk, unless pasteurized, it is possible that tuberculosis may be derived, and even the strongest man may be so invaded. Tape worm has been known to have come from eggs, and only recently has a case of this sort come under the observation of the writer. In the latter case, the man so afflicted was strong in every way, and one in whom infection would have been presumed to have been a matter of considerable difficulty. This man lived correctly, within perfect sanitary surroundings, and was extremely careful as regards his person, both internally and externally, but nevertheless there was an invasion of the ovum of the tape worm, with the consequent birth and growth thereof. Had there been no such thing as a doctor, it is very probable that this man would have continued harboring this parasite until such time as death had taken place through exhaustion, for when the case was presented, there was some loss of tissue and vitality. The doctor and his male fern were surely a necessity in this case.

We have all seen men, presumably in absolutely good condition, succumb to pneumonia, due to exposure, and we have seen such cases carried through to a satisfactory termination by the doctor, despite the argument that the latter is not a necessity, and that his drugs and other therapeutic agents are worthless. In such cases it has been found that small doses of aconitine, sufficient to control the fever, have carried the patient into the convalescent stage in much better condition than if no drugs were employed. These persons who contend that the

doctor is not a necessity, likewise say that his drugs produce conditions which are worse than the disease itself. Has this been found to be a fact in connection with the use of aconitine in pneumonia, the intestinal antiseptics in bowel disturbances, or many other drugs employed to meet certain indications? It may be true that morphine, employed over a considerable period, may be followed with a desire for that drug, but what conscientious doctor employs this, or any other habit-forming drug to any considerable extent? These persons likewise contend that the doctors employ drugs which undermine the vitality of the patient, but can this be proven? Today we find that internal medicine is based upon science, rather than the empirics, and that the doctor knows, practically, what the condition is which he is about to combat, and that he uses just enough, and no more, of the required drugs, or other agents, to bring the condition to normal. Such medication, even though marked depressants may be employed for a short time, do not produce the effects which these untutored persons would have us believe is the case.

Those who would have us adopt a vegetable diet, exclusively, and who decry the use of drugs, do not seemingly recognize the fact that many of the common articles of diet of this character contain many of the drugs employed by the doctor, and that some of them may act to form habit. Lettuce carries lactucarium, which is analogous to opium, and one frequently sees persons who have the lettuce habit, in fact can hardly eat a meal without this plant figuring within the menu. The potato carries solanin, and we frequently see these vegetarians eating this vegetable, skin and all, regardless of the fact that they are, in this way, taking a markedly active drug. Asparagus is another vegetable carrying a medical principle, and still it is recommended highly by those who would

have nothing of drugs. The citrous foods all carry an acid which is employed by the doctor, still it is eaten by those who say that drugs are deadly and that they undermine the health of the nation. In fact there is scarcely a vegetable which does not carry something which has an effect upon the functions of at least one vital organ. The fact of the matter is, that these persons who would have nothing of the doctor or his drugs are, as a rule, inconsistent in their contentions. This is due very largely to ignorance, as is evidenced by their arguments. They have never been able to observe, clinically, the conditions with which the

doctor contends, and their arguments are based very largely upon hearsay, rather than upon fact. In many instances the continued health of such persons is through accident, rather than through their mode of living, and they all eventually sicken and die, as do all humans. We will admit that, were all humans to live absolutely clean lives, there would be a decrease in disease, but until all are educated, and in a scientific rather than a sensational manner, disease will continue to appear, and the doctor and his therapeutic agents, be they drugs, serums or what-not, will be a necessity.

SERVOSS.

DEPARTMENT OF EUGENICS

HOW CAN WE HOLD OUR HUSBANDS? OR SUGGESTIONS FOR THE CORRECTION OF THE "DIVORCE EVIL."

By A Wife and Mother.

The cry of the hour is: "The divorce evil; it is spreading. How can we stop it?"

Being the wife of a physician, as well as the daughter of one, and having studied medicine to some extent, with the idea of becoming a physician myself, which plans were interrupted by marriage; and now, being the mother of four sons and three daughters, I am deeply interested in this subject and its cause and cure. The study of the human frame, together with its qualities of heart and mind, as well as ailments, is, as always, of keen interest to me, and never more vitally so than now, at the present day, with the responsibilities of maternity full upon me— and— "the signs of the times"—"The Divorce Evil"—What it is? Or; What causes it? and how can we stop it, or cure it?

Did you ever stand on the seashore, and, looking far out to sea, lose yourself in contemplation of the vastness of the deep, to be suddenly brought back to the present, or made aware of your surroundings, by your feet growing cold, and looking down, see that you were surrounded by the incom-

ing tide? And, looking farther down the beach, see children, who will be caught in the undertow and swept out to sea, unless warned? Then you appreciate my position. I am standing on the beach, and the tide is very near me (for my children will soon be taking their places in the world), and I realize how strong the undertow (of temptation and sin) is, and they are not alone, and I, seeing, must warn them and others, also.

To my mind, there are but two ways to prevent the "divorce evil" from spreading: one is to "right about face" and be better wives ourselves; and the other is to warn our children and let them profit by, or rather give them the benefit of, our own experience.

You say at once: "Oh, that does not apply to me. I am as good a wife as I know how to be." That may be, madam, but are you sure that you know how?

Now, I propose to treat this subject without gloves—as woman to woman—and give the opportunity, right here, for any who do not wish to be shocked, or are too modest, to mention such things, to withdraw,

*Texas Medical Journal, June, 1912.

at this point, as quickly as possible, so that we may proceed without interruption or unfair criticism.

I come to you, in sisterly affection, and would ask you to listen, in the same spirit, that we may be mutually helpful to each other.

How do we know, or what assurance have we, that next month or next year, we will not be in a divorce court ourselves? That we can hold our own husbands. Listen, "Let him who thinketh he standeth, take heed, lest he fall."

You may suddenly decide that you are "unequally yoked"—for the "tide is coming in," and "the other man" as well as the "other woman" is in the undertow.

The atmosphere we breathe is gradually changing from so much pressure, for the spirit of the age is "free love," "free thought," "free speech" and "free action." The "free moral agency" doctrine is being accepted in the letter of the law, instead of in the spirit, and we are trying to live "moral" (man, or self-governed) lives, instead of "God-fearing," prayer-sustaining lives, as did our parents; and the "divorce evil" is on the increase, and yet we marvel!

Now, listen: "Marriage is a failure"—as prescribed and practiced by us and our social system. Now, this, the key-note of our nation—Marriage and the Home—being the cornerstone of our national greatness, must be "reset."

Just as we have outgrown and overcome superstition and dogmas in the past, so must we change this, the vital point of our superstructure. It must change to meet the times.

The "times" have changed, and we have changed—and the attitude of the nation, along all lines; but this vital point we refuse to alter, and permit it to become our national stumbling block, instead of the institution it was intended to be—our national cornerstone.

When the home and its attributes were destroyed in old Roman times, then dynasties fell, Corinthian columns and temples of fabulous wealth melted as if in a crucible, or crumbled and vanished as a dream.

Now, there are but two ways to correct the state of affairs: First, for those of us

who are wives already to "right about face," and "charge the enemy" by having plenty of ammunition at home; and, second, rout her for all time by preparing our sons and daughters for the onslaught. I say sons advisedly, for I think the men of the future must be prepared as well as the women. The men, today, are as responsible for the "divorce evil" as the women. How? Why? Follow me, and I will try to show you.

Our own education was wrong, and we are educating into our boys and girls much that will have to be educated out of them later on.

Now, to you wives, first:

A wealthy, refined, cultured lady sought her family physician with this question: "Doctor, why is it that so many men, hitherto moral and upright, will, at the age of 50 or 60, suddenly become untrue to the wife they have loved and cherished for twenty-five or thirty years?" Her own husband having done this same thing, she was vitally interested. Her physician knew her to be regarded in all respects as a model wife. Her home and children reflected the care she had bestowed; yet, he (the doctor) asked bluntly: "Have you done your best to hold your husband?" "Have you been an ideal wife?"* The deeper meaning underlying his question is the key to the whole situation.

A man has but one nature. He is passionate and aggressive. This must be right, for God made him "in His own image," and pronounced His work "good."

Woman has two natures, passive and receptive. She was made after man, to be his complement. She was made for man's comfort, and, therefore, his other self. This must also be right, for, after making man, God saw that it was not good for him to be alone; by himself he was incomplete. He could not reproduce his kind; for he represented but half a plan. It was necessary to provide a counterpart, or complement, that the two halves might make a complete whole, thereby, the joining together of one nature to the other, a perfect union was made. Just as we say today, "it takes two halves to make a whole," so marriage, or its fundamental principle, the union of the sexes, was sanctioned by God, while the

*Dr. Bogart in Texas Medical Journal.

form of that function, or outward manifestation of this agreement between the sexes, was left to the dictates of society.

Now, you say: "What has this to do with the divorce evil?" Everything. I think our attitude or understanding of our responsibility as wives to the marriage relation is the whole cause, or the key to the whole situation. It is not so much a question of "how shall we stop the divorce evil?" I think, as how shall we hold our husbands? As I said awhile ago, the tide is coming in, and the "other man" and the "other woman" are in the undertow.

In the first place, all men are passionate. That is their divine right, but not every woman may stimulate or arouse their passion.

A wife said to me once: "I just loathe my husband; he is such a beast. Why, do you know, I can't go near him, nor caress him, that he does not make demands of me, and I am just the other way; I don't care for it at all." Poor fool. She gloried in "not caring for it at all," and pitied herself as a martyr (the world is full of her kind). That's what the matter with the divorce question. But, I say, poor man; deprived of his marital rights, conjugal happiness, and tied to a clam for life!"

And is he to blame, then, if he goes where the "red light" burns, because he is attracted by its warm glow?

That's what's the matter. Too many wives are passive, not active or responsive.

What does the Good Book say about "luke warm Christians?" It says, it "would spew them out of its mouth." Yet luke warm wives—women who are wives only in name, but not in the spirit, we tolerate and uphold as martyrs, and go on trying to legislate against prostitution. What do the thinking minds say: "You can never cure or stamp out prostitution by law or enactment of laws, for as long as there is the demand, there will be the supply."

There would be no "red light" districts; there would be no divorces; there would be no polygamy in our land, nor any need of it if wives did their full duty by their husbands!

Nor would there be any need of suffrage, nor of any one to espouse its cause, save in the ranks of old maids and widows, perhaps, if wives were wives in the Bible

sense; for women would be too busy at home, on the one hand, and have no need of "rights," on the other hand, for a man's "mistress," proverbially, "gets all she wants," from him; then why not his wife? I tell you she would, if she were alive to her duties.

I say our social system is wrong, and our education was wrong, or we would never have been confronted with this evil.

"A man goes after the woman who offers the most to his nature," was said by a wise woman.

Now, instead of a wife feeling abused and loathing her husband because he admires her for herself, she should feel complimented that she, above all women, can attract him, for she is a god, and he worships at her shrine. Ah, woman, did you ever look up, through your conjugal relations, instead of down? Try it. I think it is every woman's privilege, even duty, to do this. But more of the duty later.

Now, do you know that as men grow older they become more amorous? This probably accounts for the maxim, "No fool like an old fool;" and, also, why so many old men marry very young girls. This may be accounted for in two ways: First, because of man's innate vanity, and, second, by his natural physical condition. As a man grows older his mental powers become more sluggish, and his animal nature predominates, and his desire for the opposite sex is thus stimulated by two causes: First, his desire to show that he is "still a man," by being attractive to the opposite sex—sufficiently so to be accepted as a suitor. his flatters his vanity. And, then, in conformity to nature, which provides that the loss or failure of one sense is compensated for by the quickening of others. Inasmuch as the mind is usually the first weakened by age, so the other functions of the body are stimulated in proportion as that function wanes. This accounts for medical records of idiots and the insane being addicted to masturbation; and invalid men, especially tubercular, being the most passionate of all men.

On the other hand, women go through a physiological change at about 40, and we note that they are most active, mentally, from 40 to 60 years. This is borne out by the biographies of women writers, etc. Now, when this physical change comes upon women then sexual desire diminishes in

proportion to the mental activity, and many who are not inclined to literature devote their energies at this time to church, club or social duties; studiously avoiding the marriage relation, saying to their husbands: "We are too old, now, for such things." And he, abashed at the rebuke, or in pity for her state of health, goes to some one more sympathetic, and thus we have the husband of 50 becoming the town roué.

Oh, women, in the glory of your womanhood! Oh, wives, in the sublimity of your wifehood! Listen to me: Better be a self-sacrificing wife than a sacrificed one, for you will be the one or the other; it is inevitable.

Now, as to why so many—or I will say the majority of—wives are passive, or as physicians say, "are lacking in sexual feeling." This arises from two causes, I think. False education or the misconception of what a true marriage really is, and early marriage.

These are the two principal causes, and they produce two sub-causes or deterrent causes: Fear of pregnancy and mismating.

In the first place, our girlhood education was wrong. How far, I can best show by contrast.

We were taught to keep that instinct down. "It is unholy," "impure." A boy was taught that "it is natural," "glorious." The girl was told "it is for procreative reasons," alone, and must not be thought of or mentioned. A boy was taught that through it he was to derive his greatest pleasure and gratification, and as he grew older, the more he cultivated it, the happier he would be. In fact, as one man expressed it: "It is all there is in life." "The gratification of this" dominant "trait" or characteristic "is as natural as eating and sleeping and vastly more satisfying." Hence, to a man, it constitutes his "pursuit of happiness," and is to him first and last everything—all else in life being secondary to it.

A girl is taught modesty of habit, as well as speech and conduct. To neither think nor speak of these things; they are impure, and her mind must be pure.

Now, by contrast, I think, you can see wherein lies the difficulty which produces a never-ending conflict. Take a gentle, pure, refined girl, and a strong, healthy man, with their training thus at variance,

and place them in a room, in the relation of bride and groom and wait the result.

Her training of a lifetime must be mastered in a moment; her nature must change to meet the situation, bravely, smilingly; and if she loves the man (for his sake) she will soon conquer the first shock to her maiden modesty, and the prejudices of her nature and of a lifetime, and will soon pass from the passive, or submissive, to the active or receptive.

Now, many women, I believe, never pass out of the first state, because they are married in the sight of the law, but not mated. To be married and not mated is believed to be a cause for divorce now, and divorce is on the increase simply because women are beginning to see that their early education was wrong, and that the sexual life is a part of their lives, as much as that of the man, and they are getting bold enough to think it right to break a yoke instead of bending under it. Now, this is why early marriages are not advisable. A girl is not fully matured in mind, if in body, before 22 or 23. The first eighteen years of her life is spent in physical development, and she has not mature judgment, or a live, active mentality under that age. Hence, if a girl waited to be 22 or 23 she would come nearer choosing wisely, as a man does, for physical reasons.

This immaturity of judgment is the primal cause of early marriage, with attendant influences of outside causes, in which the girl is the victim, and is the prime cause of so many separations and divorces in later life, when you would expect more sense. But they have put up with each other until the "other man" (or woman) is found, the one who really answers the call of their half-starved nature, and they (emboldened by the spirit of the times in which we live) immediately revolt from, or rebel at, the chronic state of "putting up with" each other, which has been going on for so many years.

Now, women, listen! This brings me to my two sub-causes of the passive state, or indifference of wives. The first cause, I think, is mismating. This realization that they can not respond to their husbands is due most often to the fact that they are mismated; that is, that he is not the man who calls to her nature. Enjoyment of sexual life is as natural in one sex as in the other.

This is demonstrated by appliances for women for their gratification found in China, and other foreign countries, to be used by them when confined in harems or other places where they are deprived of the natural caresses of man.

Medical science has not determined whether the seat of passion is in the spinal cord or in the brain. However that may be, mind plays an important part in this act, as in everything else we do.

I think there is good in everything, if we but look for it. Now hear what a Christian Scientist told me. This little woman, a pure, true wife and mother, in speaking to me of her infelicity, said: "Do you know that for a long time I could not bear his caresses, until I finally determined to see him, in my mind, as beautiful as Apollo, and you don't know what a change it has made in me."

Now, this good, pure, true little wife, struggling along with her duty, blinded by the superstition of ages, had suddenly come into the light, yet failed to see that within her hand was the key for which other wives have been struggling.

She, in her suffering, had arrived at the door, through which, now, all other wives may pass. And, wives, let me tell you, it is your remedy, if you are one of the ill-mated ones, not the divorce court and publicity, but "close thy door and pray to thy Father in secret and He will reward thee openly." When your husband approaches you, instead of shrinking from him, see in him the image you would have him be, close your eyes if necessary, but fix your mind, and before long you will be happy to see the transformation in yourself and the renewed joy it will bring to him. It will more than recompense you for your secret endeavor.

The second sub or deterrent cause of why a wife does not, or will not, yield herself entirely to her husband's pleasure is the fear of conception.

Now, in the first place, procreation is the Divine consummation of marriage.

Woman was made, not man, to propagate the species. That is why love of children is stronger in her than in him. And when you deny yourself child-bearing, which is as natural a function of your body as menstruation, or anything else, you starve that part of your nature, which in turn starves, or

presses or pinches some other part of your being. This, then, manifests itself outwardly by irritability prompted by an unsatisfied longing, which you can not describe. The prevention of pregnancy is one of the most fruitful causes of disease of the pelvic organs. Why? Because nature has been tampered with, if not outraged, and she rebels. Sit for an hour, in any physician's waiting room, and see who form his clientele. The largest per cent are childless women, or the mothers of only one or two children, and old maids. You rarely find the mother of a large family there.

We hear much nowadays about "limiting the family," etc. "It should be quality and not quantity," etc. The "high cost of living" being a barrier, etc.

I am heartily in favor of sterilizing the unfit, permitting only the "fit" to marry, by demanding health certificates, etc., but I do say that with these regulations the "fit" will have to bear the brunt of populating the world, or in a few years we will find ourselves where France was when the cry went up, "France needs mothers!"

It is no harder to rear a large family today than it was in our grandmother's time; it is simply the lack of ability to meet conditions. If women spent more time in the home, studying "domestic science" and "economy," and less in "bridge" and discussing the equality of the sexes, the big families would be just as easily reared.

In this paper I will not attempt to show the benefits derived by a mother from child-bearing (in itself) to her, physically, mentally and morally, nor the advantage gained through it to both parents, and thus through the home circle to the state; but will close with a few thoughts as how best to help our children to profit by our mistakes and thus prevent divorce and its cause in the future.

First, let us modify the teaching of the sexes. Teach our daughters when they arrive at the age of puberty what the marriage relation really is, by citing our own experience, which will cement a bond of sympathy between mother and child. Next, that it is a holy instinct, and the gratification of it should be a sacred duty, not to be regarded lightly nor forgotten, but to assist them in mating for life.

We do not force our daughters into loveless marriages for money or social position any more, but we still fail in parental duty

by not teaching them that this function is the key-note to their future happiness, and is the quintessence of Love. We should advise them not to marry under any consideration until they meet the man whose nature calls to theirs.

Tell them not to be impatient nor mistaken by social position, nor wealth, nor pleasing personality; those are charms only, and will vanish, unless suggested by that deeper feeling, that true, dominant love which recognizes no flaw in its affinity, but whose soul meets soul.

Teach our sons that they are gods, not

beasts. Teach them more modesty and consideration of another's feelings.

Teach them that they are endowed with "passions as glorious as the sun" for divine reasons; and it must be the study of their lives to respect those reasons.

Could we be wives and mothers like this, then, indeed, would our children say of us, "She hath done what she could;" and would rise up and call us blessed; and our husband's encomium would be: "Age can not wither her, nor custom stale her infinite variety."

WHAT NOT TO TEACH OUR CHILDREN UPON RACE HYGIENE.

A Talk on the Dangers of Half Truths.

By Woods Hutchinson, A. M., M. D.

"What he doesn't know won't hurt him. That is the excuse we give for not telling our neighbors an unpleasant truth about his own affairs. It is what the quack says of the unsuspecting sufferer from an obscure but fatal malady. And it is a lie."

These fearless words of a dauntless foe of superstition and dogma expose the insincerity and positive harmfulness of many of the books which purport to offer instruction to the young in matters of sex. Many of these books, even those having distinguished indorsements, are merely "made to sell."—From *Good Housekeeping Magazine*, Copyrighted 1912, Reprinted by Special Permission.

There are few greater calamities than ignorance—just plain ignorance. Theoretically, it is a negative state; practically, it is a positive force. Leave a child in the dark, and the last thing he will do is to sit perfectly still. He will inevitably reach out and grope and stumble until he tears his hands upon all the thorns within reach, cuts his feet upon all the flints, or falls over a precipice. No light, however blinding, or fitful, or distorted, is half so dangerous as darkness. Light, just light alone, is the greatest foe not merely of error but also of disease and suffering and misconduct. Sunlight is the strongest germicide known to medicine.

All honor, therefore, to those who with

pure intentions have endeavored to let some ray of light into that darkest and most fascinating of the mysteries of the ages, human birth and reproduction.

Naturally the knights-errant who first laid lance in rest against this dragon of superstition were filled with both a fierce resentment against its atrocities and an overwhelming conviction of both the justness and importance of their cause. Nothing less, in fact, could have given them the courage to face the serious dangers of misapprehension, ridicule, and even disgrace which such a breaking of the sacred silence would bring down upon them. The result was that they not infrequently, like enthusiastic advocates and special pleaders everywhere, overstated their own case and by so doing very frequently overshot their mark.

Some of those who have come forward to instruct the young upon the continuation of the race-stream make no pretense of any training in or broad knowledge of physiology, biology or medicine, and hence discuss the race-instinct almost solely from the point of view of the errors and misconduct and misfortune to which it gives rise. Thus they assume an attitude toward its manifestations almost like that of the ascetics and the hermits, as if it were chiefly a fruitful soil of all sorts of evil passions and disaster.

Others, on the other hand, go to the op-

posite extreme and magnify and exalt the importance and the overmastering power of the race-instinct. They give the impression that its gratification and its culture are one of the chief aims and objects of life, and that the existence of a normal human being is one continual succession of struggles with overmastering temptations, and that love in all its phases occupies at least two-thirds of his attention, instead of the one-tenth or the one-twentieth, which is nearer the actual fact. To them life is one long meditation upon love and its results and centers in and around sex, and their pages are, unintentionally no doubt, practically as frankly erotic and openly sex-worshipping as the older cults of mystery and secrecy which they denounce and attack. A thoughtful parent would hesitate long before putting them into the hands of any healthy-minded boy or girl.

Yet other volumes upon this subject appear, ungracious as the statement may sound, written more for the purpose of producing a sensation, or by the luridness of their statements insuring an eager perusal and a large sale, than from any desire to convey rational, helpful and reliable information upon the subject.

In fact, regrettable as is the necessity for the statement, the best thing for the intelligent mother or father to do with a considerable proportion of books for the instruction of the young in matters of sex is to pass them carefully through the filter of their own minds, read them themselves, and pick out and pass on to their children the grains of wheat of accurate information and rational advice out of the bushels of chaff or rank sensationalism, hysterical overstatement, sloppy sentimentality and eroticism disguised as maudlin pseudo-piety.

Parents who place a book in their child's hands as a substitute for personal advice and information and counsel are evading one of their highest parental responsibilities.

How Early Should Children Be Instructed.

One of the greatest difficulties with which this class of volumes has to contend is that they are usually put into the hands of their readers from five to ten years too

late. We often hear the question gravely and urgently debated. At what age shall the giving of information to children on these subjects first begin? Nature in her wisdom has provided us with an answer: Whenever they begin to ask questions. To the pure, all things are pure, and if anything can be purer and sweeter and cleaner than the mind of a little child, I am unable to conceive what it may be. If their first naive questions as to where babies come from—"What was I before I was a little boy?"—are answered clearly and truthfully, with a simplicity and brevity suited to their little intelligences, you will be surprised and delighted to find how easily and naturally and simply all the important facts about race continuance can be given to children before they are eight years of age. It no more occurs to them at that age to regard such facts as improper, immodest or even improperly amusing, than would similar information in regard to their digestions or the growth of their teeth or hair. Indeed so keen is their clean and natural curiosity about such matters that any mother who meets it and answers a quarter of their questions will hardly know when such "instruction" begins nor when it ends. Don't wait until their little minds are full of filth and then begin to pour in disinfectants as the current custom is.

Many of us cry out in horror at such an idea, for fear of destroying the beautiful innocence of childhood, the delicate charm of unconsciousness, and making them old and full of the knowledge of evil before their time. Yet, at the same time, with a sublime inconsistency, we do not hesitate to permit their little minds to be filled with all sorts of ridiculous fairy tales, and take special pains intentionally to cram their clean little imaginations with all sorts of grotesque and misleading Greek myths and Norse saga and Hebrew legends which pain and distress a healthy-minded modern child by their bloodthirsty cruelty and their injustice and often repel him by their indecency.

Another important point which most of these volumes on sex hygiene fail to grasp and state in its proper proportion, is the overwhelming degree to which the race-continuing instinct and its processes belong and are for the advantage of the race, and

not for that of the individual, still less for his personal enjoyment, or for the benefit of his health. They are far too exclusively concerned with either extolling and describing the safety and honors and life-long enjoyment assured by chastity and the legitimate gratification of the race-impulses, or else, and even more frequently, in painting in the blackest and most repulsive of colors the terrible penalties which will follow misconduct and misuse of these powers.

You simply cannot frighten either children or grown-ups into being good. No matter how heavy the penalties prophesied, they will take a chance and run the risk, just this once at least, especially when they see upon every hand scores who have broken the law and apparently escaped unpunished.

But if you once implant in the plastic minds of children the clear and definite idea that these great powers belong not to themselves, but to the race; that the thing to be considered in their exercise is the welfare of the race, the purity of the race-stream, and the vigor and happiness of their children, you will give them a definite and positive motive for conduct, a clear, attractive and desirable thing to do, instead of a score of things to avoid doing. It will give them a fixed and unchanging star to guide and lead them in the right direction, which will save them from the dangers on either hand far more surely and safely than any amount of threatening and denunciation and warnings of the bitter personal penalties of misconduct. The mere danger of venereal disease, or dread of detection and disgrace, is among the feeblest of the springs of action and incentives to right conduct in racial hygiene, and should be made to play a very small part in any scheme of sex education, although the facts about them should be clearly and frankly stated. Yet from some of these volumes one would almost conclude that the principal reason for right conduct was the hope of escaping disease and avoiding police-court complications.

A Popular Delusion.

When once this point of view is clearly fixed, all the futile discussion as to whether the exercise of this function is necessary

for the health and proper development of the individual falls by its own weight. There is not and never was any real physiologic or biologic excuse for raising the question, as may be glimpsed by two significant facts. One, that was always raised in regard to the dominant, never, by any chance, in respect to the gentler sex. The other, that in all or most of the higher animals, whether in a state of nature or under domestication, the young of both sexes are prevented from exercising this function until full maturity has been reached, if vigorous and high-grade offspring are desired. Every farmer or breeder of thoroughbred stock adopts this principle as a matter of course; for instance, thoroughbred horses intended for the race track are not permitted to mate until four, five and even six years of age. In a state of nature the same result is in large measure attained by the habit of the older males fighting and driving away the young males until they are able to win their place in the herd by fighting for it.

It is well to emphasize this fact because many a boy or young man has taken his first wrong step under the glamour of the partial justification afforded by assurances from his older comrades that he never can grow into a strong manly man without it, or, I am ashamed to say, even the advice of a certain class of members of my own profession, that his health will be benefited thereby. The conception of this function as primarily and chiefly for the benefit of the race and the welfare of future generations will help both the boy and the girl to understand why its active manifestations should occur so late in childhood, and why five, or even ten years, of clean, honorable living and self-restraint after it has manifested itself, are only a reasonable and a moderate price to pay for its exercise at fullest efficiency and with the highest degree of benefit to the next generation. The honor of the race and the dignity of the blood demand this period of wholesome restraint and of happy, vigorous maturing of our full powers before passing on the torch of life to the next generation.

This clear and early enlightenment makes it easy to prepare children's minds for, and warn them in advance of, the coming of the outward manifestations of the race-continuing functions in both sexes, so that they

will be neither puzzled nor frightened by their appearance, as is, alas, now too often the case. Here is a point where many of these manuals are not merely negatively but positively in error, and seriously so. They understand and state clearly enough that the manifestations of this function occur with periodic regularity in girls, but they utterly fail to make clear that a similar rhythm of function occurs in the opposite sex, though not with such definite regularity. On the contrary, they paint in the most lurid colors the terrible results which will follow if this safety-valve action on the part of nature takes place with even its normal and natural degree of frequency. They devote pages and chapters to absurd and irrational instructions in regard to dieting, particularly the avoidance of those ancient bugbears, meat and spices, and to methods of bathing and exercise and even of position in sleeping, which they claim will abolish and suppress this perfectly normal and healthful manifestation. They even hold up more or less imaginary heroes and great men who, by simply avoiding this manifestation entirely, which no normal man or boy ever did, have saved up and economized their vital forces until they became great men by virtue of it. It would be as rational to expect to add a cubit to your stature by saving the parings of your fingernails. So that many a poor young fellow between being assured on the one hand that his health will suffer and his manhood be impaired if he does not exercise this instinct in the natural way, and on the other hand that this normal and harmless safety-valve action which will occur if he restrains himself, will land him among the failures, and even in the insane asylum, just throws up his hands and follows his instincts.

As a matter of fact, we have absolutely no evidence that any form of sexual excess, whether natural or unnatural, ever caused insanity or even led to serious mental impairment. On the contrary, we now regard all serious excesses of this description as among the first and earliest signs of an in-born tendency to insanity. Extremes in this direction and excesses in the use of alcohol are regarded as the first manifestations of mental unbalance, and while they probably accelerate the rate of mental decay, they never initiate it. And yet there is

scarcely one of these books written for young men which does not contain pages of horrible examples of mental wreck and moral ruin and failure which have sprung from such trifling beginnings, and the gradual insidious growth of the soul-destroying habit, oblivious to or ignorant of the fact that no one ever went insane from this cause who was not mentally defective to begin with.

Two of the most potent influences in leading the young into sexual errors are, first, blind curiosity, which has never been gratified by a clean and simple statement of the facts, and second, among boys, a vague, but powerful impression, that in some way the exercise of the function is necessary for their health and perfect development, and that it is unmanly, and even something to be ashamed of, to refrain entirely.

Immorality a Symptom of Insanity.

Another important omission in these books is the recognition of the fact that, while children are naturally intensely curious about these subjects, the majority are naturally, clean-minded and decent, and that most of the distressing atmosphere of morbid interest in and unclean knowledge of such matters, which unfortunately frequently exists, especially among school children, is due almost solely to the contagious influence of one or more vicious or evil-minded children in the group or neighborhood. When these "plague-spot" children are studied they are generally found to be either the descendants of parents of the same stripe or brought up in homes with a bad atmosphere, or else, and most frequently, to be mentally defective, or perverted and abnormal in some way.

One of the most important tasks of the new, or rational education, which it has already entered upon, is, by having all the children of three years of age and upward examined by not merely school teachers, but competent physicians and experts in mental disorders, to weed out from among the normal and wholesome-minded children these unfortunate perverts, together with other mental defectives, and isolate them for special instruction and character-building in classes by themselves. Even the first steps that have already been made in

the direction of this picking out have immensely improved both the discipline and the moral tone of whole classes of normal children. In fact, it has often been found that the manners and minor morals of a whole class have been corrupted and the best efforts of the teacher neutralized by the morbid and perverse activity of one of these unfortunates.

Just the same thing has been found to be true in the children of larger growth, and one of the most hopeful and cheering lights that has been thrown on the dark and distressing problem of prostitution has been the discovery that, upon careful examination by experts in mental disease, from forty to sixty per cent of all fallen women are found definitely mentally defective or perverted or abnormal in some way. Parallel with this is coming the belief that a large part of the support of houses of ill fame comes from similar defectives and perverts of the male sex, and that if these two classes of defectives, both male and female, could be segregated in colonies, or sterilized and taken under the guardianship of the community, two-thirds of the social evil, with its morbid appeal to the occasional wayward impulses of normal men, would be done away with, and with it would go, or quickly follow, the venereal diseases. To regard it, as has usually been done, as a normal, necessary institution of society, a safety-valve for the institution of marriage, is little short of absurd from a biological point of view. To put it very crudely, it creates at least three-fourths of its own trade, and by its very presence awakens abnormal cravings which, without it, would seldom or never have sprung into existence.

A good half, if not a large majority of normal men have to get drunk before they are attracted by the red-light district, and two-thirds of its existence is due not to passion, but to the greed of disgusting parasites who prey upon and make all the real profit out of it, like maggots in an ulcer.

Lastly, the tendency in sex instruction is to magnify and dwell upon, out of all proper proportion, the evils and penalties and terrible consequences of venereal disease. This is objectionable from a pedagogical point of view, as already stated, and it is also unnecessary, for the situation is bad enough without any exaggeration. It is perfectly true, unfortunately, that a con-

siderable proportion of men, no one can possibly say how great, do at one time or another in their lives, contract the milder of these two plagues, and possibly somewhere between five and ten per cent the graver one. It is also lamentably true that the first wreaks a terrible vengeance upon the offender's wife or children, and causes more than half of all childless marriages, from one-third to one-half of all serious pelvic inflammations, and by its infection of the eyes of infants in the process of birth, is the cause of the blindness of from one-tenth to one-fourth of all the inmates of our blind asylums.

It is also a fact that the other plague causes nearly ten per cent of the insanity in men, through its effect upon the blood vessels of the brain, nearly one-third of all strokes of paralysis and apoplexy, a considerable share of all miscarriages, and, that through its saturation of every drop of the mother's blood, her unborn child may be infected and either born dead, or alive, but cursed with this terrible plague, to blear its eyesight and stunt its growth and make it snerves and arteries old before their time. In fact, both of these race plagues are terrible curses to humanity, polluters of the race-stream and foes of fertility, and if any individual wishes to place himself and his wife and children in the unfit class, ripe for elimination, he cannot take a more effective step in that direction than to allow himself to become infected with one of them.

Yet, in spite of all their catalogue of terrors, the consoling fact remains that the human species has survived them both for at least five hundred years, and probably for fifteen hundred, and that its vigor and resisting power have in such large measure risen superior to them that the opinion of the most careful experts is that they are diminishing in both virulence and frequency.

Meet and satisfy the healthy curiosity of our children at the proper time, give them a clear conception of the dignity and honor of the race-continuing process, weed out the perverts who are poisoning the clean minds of normal children, break up the abnormal plague-spot of prostitution, and tell our boys and girls at the proper time plainly, and rationally, of the dangers and penalties that follow errors and misconduct, and the

social evil will soon be wiped out of existence.

VEREREAL DISEASES AND MARRIAGE.

Michigan, in 1899, enacted a just and beneficial law, making it a felony for any one to marry while suffering from uncured syphilis or gonorrhea, punishing by a fine of \$500 to \$1,000, imprisonment not more than five years, or both, allowing husband or wife to testify against the other, and removing the privilege of medical secrecy in such cases.

We have long contended for the justice and public policy of such a law, but would not limit its provisions to those in the marriage relation. It should be considered an assault, both upon the individual and upon society, for any one to go about inflicting such dangerous diseases. There will arise, however, difficulties in determining guilt and securing conviction in many cases. These the ingenuity of the courts ought to be able, generally, to overcome.

PROTECTION OF BRIDES.

Indiana and several other states have a law requiring each applicant for a marriage license to swear that he is free from all transmissible diseases. The primary object of the law is the protection of the bride. It is the duty of the state to shield the innocent from the infection of diseases that ought to be unknown and unnamed.

The law does not affect to regulate morality, though it will ultimately have strong tendencies in that direction. But the knowledge of this requirement by the state must gradually permeate the entire community, and will put the unsuspecting on their guard. It will warn also the unfortunate or guilty sufferer from such disease, that before seeking a marriage license he must be permanently cured. Otherwise his bride will be contaminated, and his offspring tainted.

"Where one child," says the Chicago Society of Social Hygiene, "is blinded by the brutality of the father, perhaps fifty lose their eyesight" through cause, which the circulars of the society name and explain.

The action of these states marks the beginning of the end of public apathy and ig-

norance on these grave but delicate questions. Protection of the public health in this respect is largely a matter of popular education. Few men would contract marriage while yet uncured, if they only knew the consequences. The idiotic, imbecile, or insane children in charitable institutions, are chiefly due to this cause. More enlightenment with facts known to all physicians will in most cases be a sufficient deterrent to protect the innocent and to relieve the state of the ultimate burden of caring for the blind, the insane, or the unsound progeny of such disease.

For the state thus to call attention by public statute to a subject upon which few teachers of physiology and still fewer parents are either willing or qualified to give adequate instruction—that which shall not do almost as much harm as good—is one of the greatest boons that wise lawmakers can confer upon any community.

Simply to enlighten men on this subject, the condition of many of whom is due to absolute ignorance of the peculiar consequences that follow illicit conduct, is to reduce the suffering of wives and children, to shield the otherwise helpless victims of ignorant contamination, to lessen the number of such unfortunates out of sheer respect for the rights of their future children, and to strengthen the manly sense of self-respect and self-control that is inherent in every normal youth. Such enlightenment teaches strong young men that morality, while taught by all religions, is not the outgrowth of religious creeds, but a necessary element of self-preservation in any society. A little real knowledge from unquestioned medical authority will forever relieve any young man of the idea, said to be somewhat prevalent, that strict personal virtue is merely the sign of a "goody-goody" effminacy.

When the young man learns that morality is the wisdom of human experience and is proved to be necessary by human suffering, then the lessons of scripture and revelation appeal to him more strongly a message of kindly warning to one who knows not from those that know is not likely to arouse any antagonism. Such a message is conveyed by the publication of the society above mentioned. Those publications are not sold to anyone; but any parent or teacher or other person interested can see

cure copies by addressing the society at 802 State street, Chicago.

While we are gratified to the Giver of Life that the ravages of such disease are very uncommon here. [This is not true of the conditions existing today in Utah.—Editor.] still we should guard against the introduction of evils that are the chief curse of civilization.

One may exclaim: "It is not my son," and another declare, "not mine," but who shall be neighbor to that man's son who does worse than fall among thieves? Here is a chance for the most refined, the most tactful of teachers to impart the most beneficial of all teachings—those that make for the salvation of both the body and soul of those younger men, who are not aware either of the secret sources of evil in their own desires or of the lasting consequences of transgression.—Deseret News, October, 1907.

THE SOCIAL EVIL IN CINCINNATI.

On January 22nd, there was organized in Mayor Hunt's Office a society for the study of social problems, with special reference to the prevention or regulation of the social evil. On that occasion Dr. Walter R. Griess read a paper embodying three important points, the prevention of prostitution, its regulation, and the cure, if possible. We have pleasure in giving space to the article, which is of great value to every student of economic conditions as existing in our fair city:

In discussing the subject of prostitution, it can, I believe, best be taken up under these divisions:

1. Its prevention, when possible.
2. The regulation of the evil when it does exist.
3. The cure; that is, the attempted reformation of the unfortunate individual.

In discussing its prevention, this can only be done when we recognize the cause or causes. In this instance the causes are so varied and many that I will limit my discussion to those preventative steps which can be taken by city officials, leaving out of consideration entirely the great value of early training in the home, church and school. It must be admitted, however, that no matter how deficient this early educa-

tion has been, the city officials can by proper regulation be a potent factor in lessening the growth of this evil. Certain policies must be adopted, such as (a) co-operation with social workers in affording clean, wholesome amusement for the public; (b) co-operation with the press in suppressing the publication of the names of unfortunate girls, who have perhaps made some false step and thereby got into the network of the police. It must never be forgotten that unnecessary public disgrace will only too often drive a woman to suicide or a life in the underworld.

All cases of suspected rape should be handled carefully before they are given publicity. I need not tell my hearers that in many cases these accusations originate in the mind of a precocious delinquent child, the angered parents fanning the flame, little thinking of the stigma that will forever remain on the child. I have examined innumerable cases of suspected rape while at the City Hospital and as assistant police surgeon, and have found five genuine cases. In my observation as to the cause of prostitution I have found more than one case in which total abandonment followed such unnecessary exposure.

The elimination of street walking, as it is termed, will work for much good, in that young girls who are morally weak but have not yet completely fallen, will be saved from a life of total shame. The professional prostitute who indulges in this sort of soliciting is eliminated at the same time.

So with one stroke the pupils and the teachers are removed from the foremost preparatory school for prostitution.

Regulation.

In the second division of my paper I want to deal entirely with regulation. But I, for one, would not countenance regulation unless it is always associated with an attempt at reformation. To regulate a vice and not attempt to at least mitigate the evil, is a responsibility that no honest man can shoulder. First, every avowed prostitute should, of course, be registered at police headquarters and her photograph secured at the same time. I would suggest that no girl be registered unless she first have a conference with some religious adviser of her own choosing or denomination. This will give the church great opportunity for missionary

work in our own city, and a place for such consultation should be provided at the City Hall.

The regulation, from a medical standpoint, of hardened prostitutes is not such a difficult task. It can be done just as easily as all these other reforms which have been accomplished in the last three weeks. Just let them know you mean business. Examinations should be conducted at regular intervals by physicians. The giving of certificates and the like, as certifying that Maud Blank has this day been examined and is free from any contagious or venereal disease, and that the certificate expires after seven days, is a disgrace to the medical profession. It only encourages illicit intercourse, and gives an entirely wrong sense of security to the male patron. In the place of a certificate which certifies as to the good health of the individual, and which means to convey the impression that she cannot be the host of a venereal disease, I would offer a substitute certificate which would perhaps read as follows: "This is to certify that Maud Blank has this day been examined, and the examiner cannot guarantee that she will not transmit a venereal disease, even though no active signs of any venereal disease are present or apparent."

How often do venereal diseases come under our care, and the unfortunate individual tells us that the one from whom he contracted this disease had just received her certificate that day.

The Department of Health, I believe, should have supervision of these cases. Inspections should be made at odd times, and should it be found that any physician has been guilty of inefficiency or gross carelessness then there are plenty of laws and regulations which give the Board of Health ample power to act.

When a diseased condition is discovered by any physician, the Health Department should be notified and the case inspected. The girl should be given the privilege of going to the City Hospital, not as a prisoner, or to some private hospital. In order to prevent the possible cry that some physician might perhaps for mercenary purposes treat the case too long, the girl should have the privilege at any time of being examined by the Health Department, the board in fact acting as judge in the

matter, as they do now in other contagious diseases.

Regulation by the Board of Health should, of course, at all times be tempered with kindness and justice.

The methods of medical examination I will not discuss, for that would only be of interest to physicians. I wish to state, however, that certain practical rules can be laid down by which the examining physician can be governed and by which they would have to abide. If the health department has regulations by which consumption and all other contagions are kept from spreading; if it sends inspectors into the homes of our best families, let them act as fearlessly in this matter, and I am certain that our asylums and hospitals in years to come will be robbed of a large proportion of their inmates. We all know what a role syphilis plays in the production of insanity and other grave conditions, and we are all aware that thousands of innocent women must undergo some surgical ordeal on account of the other venereal disease—gonorrhea.

I do not believe in regulation associated with railroading. The landlady, as she is termed, should be forced to pay one dollar a day should any girl be taken to the City Hospital, a method which has been employed before. This will work out for the general good. She will see that the girls keep themselves surgically clean, since it is a known fact that certain medical measures can be adopted which will to a great degree prevent the individual from inoculating other persons. The discussion of these methods has no place here.

Now, as to the cure. What can be done when the woman has become a hardened prostitute. I say she can reform! I myself have seen many cases. Reformation can best be accomplished during a serious illness. Then it often becomes a simple matter, an individual matter. It cannot be accomplished when the mind is in a rebellious state. I therefore strongly oppose the railroading tactics so often employed, and before referred to. Such women should not be locked up if sick. They will not run away, if they know that the police will only find them and then be severely dealt with. I will ask you how you could expect any girl to even think of reformation while

being detained in O ward at our City Hospital.

Reformation comes only from within, and unless that thought be brought home to the individual's consciousness, either by association or surroundings, then, gentlemen, the psychological moment for reformation has not arrived.

To my mind, this is one of the great questions that affects public health, the

other two being the care of the food supply and general hygiene. If the last two receive so much attention, I am certain the first should not be overlooked. I am certain that our most excellent Board of Health will act properly in this matter, but they can only act efficiently if the Police Department as a whole, including the court, will act with them. I sincerely believe that these two departments are in accord.—Lancet-Clinic, 1912.

MEDICAL NOTES AND ITEMS

DAVIS COUNTY MEDICAL SOCIETY.

The Prevention of Disease in the Home and School.

A public meeting of the Davis County Medical Society was held at Kaysville, 16th of July, to consider and discuss the subject of prevention of disease in home and school.

The program, after the excerpt, "We Doctors Preach the Gospel of Hygiene, and We Do it With Perfect Sincerity. If Only People Would Listen, We Should Be Speedily Ruined," was as follows:

Address of Welcome by the Mavor, Dr. Sumner Gleason, "The Attitude of the Medical Profession Toward Preventive Medicine in the Home and School."

The President's Address, Dr. John E. Morton, "Practical Pointers to Parents."

Dr. S. G. Paul, Health Commissioner of Salt Lake City, "The Necessity for a Medical and Physical Examination of all Pupils in the Public Schools for the Promotion of Mental Efficiency, and the Advancement of Hygienic Principles and Good Health."

Discussion, opened by Dr. R. C. Smedley, Salt Lake City, member of State Medical Council of Utah, and Henry H. Blood, President Davis County Board of Education.

Dr. Thomas J. Howells, "Preventative Measures in Summer Diseases."

Discussion, opened by members of the Davis County Medical Society.

Dr. Paul's eminently practical paper was fully discussed by Drs. R. W. Fisher, president of the State Medical Association; R. C. Smedley, member of the State Medical Council; Joseph Grant, ex-president State Dental Association, Gleason, Rutledge, and

other members of the County Society. The meeting was well attended. Messrs. Sheffield, Barnes, Galley and others spoke to the following resolution, which was carried by an unanimous vote:

Resolved, That this meeting of citizens of Davis County, Utah, in view of the advantages, both physical and educational, to be gained by the medical, including dental, examination of the children attending the public schools, requests the public school authorities to arrange for a systematic and periodical medical examination of all those attending the district and high schools of this county, and pledge themselves individually to use their best endeavors to carry out the suggestions of the medical examiners in regard to treatment and quarantine if and when same becomes necessary.

The society is arranging for other public meetings at Bountiful and Farmington in August and September.

MEDICAL AND PHYSICAL EXAMINATION OF SCHOOL CHILDREN.

At a public meeting called by the Davis County Medical Society, held at Kaysville, July 16, 1912, to consider and discuss methods for the prevention of disease in the school and home.

It was resolved that this meeting of citizens of Davis County, Utah, in view of the advantage, both physical and educational, to be gained by the medical, including dental examination, of the children attending the public schools, requests the public school authorities to arrange for a systematic and periodical medical examina-

tion of all those attending the district and high schools of this county, and pledge themselves individually to use their best endeavors to carry out the suggestions of

the medical examiners in regard to treatment and quarantine if and when same becomes necessary.

FREDERIC CLIFT, M. D.,

MEDICAL PROGRESS—Continued

Our experiments at Columbia have shown that in not a single instance has a depression followed the use of caffeine. However, this verdict in favor of caffeine must not be considered as an indorsement of drinking too much coffee, because coffee as well as tea contains other elements that act as stimulants and that induce periods of reaction, and hence are injurious to the system. Coffee has an oil that induces sluggishness, and whose effects last much longer than that of caffeine. Tea contains tannin, whose bad effects are well known."

Does Vaccination Protect Against Smallpox? In the decade 1900-1909, in Prussia (population, 34 to 39 millions), where vaccination and revaccination are compulsory, there were only 279 deaths from smallpox. During the same period, in the registration area (population, 30 to 48 millions) of the United States, there were 6,546 deaths from smallpox; and in Italy (population 32 to 34 millions), 17,716 deaths.

Nut Bread for Diabetics. Hodgson (quoted in *Progressive Medicine*) gives the proportions of a flour which he has used for several years, and which can be made up in the form of small cakes or biscuits and then dried: Unground poppy seed, 3 lbs.; ground nuts (almonds, pecans, filberts and English walnuts), 8 lbs.; eggs, 12; flour of dried spinach, 1 lb.; salt to flavor; milk to make a stiff batter. For constipation in diabetes, he has found serviceable a mixture of equal parts of olive oil castor oil and glycerin emulsified with a small quantity of gum arabic.

Paresis of the Bladder in the Male. Wm. F. Waugh (June *Critic and Guide*) in the treatment of dribbling and tenesmus in elderly men, has his patients eschew spices, condiments, cresses, alcohol and all dietary components containing volatile oils. For the mucous irritability he recommends ar-

butin, one-sixth grain 7 or 8 times a day, continued indefinitely if need be. To energize the detrusor muscle he employs very small doses of cantharidin (1-15,000 grain not more than 7 times a day), avoiding larger doses, since these act as an irritant. Physostigmin may be added later to aid in stimulating evacuation of the bladder.

Treatment of Snake Bite. The not very infrequent occurrence of persons being bitten by a rattlesnake in this region, makes a summary of the able article of Henry Tucker, curator of the Academy of Natural Sciences of Philadelphia (*May Therapeutic Gazette*), of special interest to our readers. Dr. Tucker admonishes to keep one's head (death from snake bite is extremely rare in this country), and likewise to preserve the head of the snake for identification. If the bite is on an extremity, tie one or more ligatures, preferably a broad, rubber band, above the wound to prevent the poison getting into the general circulation. Incise the wound deeply, cutting across the puncture for at least one inch, and well beyond the depth made by the fang; wash or suck the wound (rinsing the mouth thoroughly with potassium permanganate solution). Now wash well the wound and use in and around it the solution of permanganate or one of chromic acid (1:100), being careful to completely infiltrate, not only the wound, but also the surrounding tissues. Do not give ammonia. Stimulate with small doses of whisky, if indicated. "More persons have been killed by giving large quantities of whisky than by snake bite." When certain that the poison has been removed from the wound, loosen cautiously the ligatures, first the one nearest the heart, tightening again if symptoms recur. The wound should be kept open by packing with wet antiseptic gauze, as sepsis and local gangrene are very liable to ensue.

MISCELLANY

POULTICES SHOULD BE STERILE.

Prof. George Howard Hoxie of the University of Kansas in his most excellent book on "Symptomatic and Regional Therapeutics," states under the heading of localized inflammation that "the danger of infection should ever be in mind in applying a poultice, for the maceration incident to the poultice favors infection, even if in ordinary circumstances one might consider the area germ proof."

Again he refers under the chapter on Pain, to the dangers from using dirty poultices and that skin affections have been added to the ordinary disorder when bread-and-milk or linseed poultices have been used to relieve pain.

It is thus noted how important then, it is, in the employment of a poultice for the relief of pain and inflammation, that a sterile and trustworthy product be applied. Inasmuch as poultices are a means of producing hyperemia by the use of heat and insofar as they do this better than by other means, it is interesting to observe that in the belief of Prof. Hoxie that "the clay poultices, known best in the form of Antiphlogistine, are the best to employ, as they are sterile and clean."

Antiphlogistine affords not only a safe but clean method of utilizing the advantages of hot moist heat in the treatment of pain or inflammatory conditions. It maintains heat in contact with the part for hours and its adaptability is only secondary to its therapeutic value.

AMERICAN PROCTOLOGIC SOCIETY.

The September issue of the *Proctologist* will contain the papers and discussions of the American Proctologic Society for 1912. R. H. Barnes, M. D., Metropolitan Bldg., St. Louis, is the editor.

There's a Surprise in Store For You—and a most agreeable one too, if you have been using chloral and the bromides wherever you wanted to quiet a restless patient or overcome insomnia. The surprise will come when you begin using Pasadyne (Daniel's Concentrated Tincture of *Passiflora incarnata*) and find how much more efficient it is than chloral and the bromides, and **how free from their dangers and unto-**

ward effects. The next time you want to sedate a patient, use Pasadyne and experience the surprise spoken of. A sample bottle will be furnished if application be made to the Laboratory of John B. Daniel, Atlanta, Ga.

Respirazone—A very satisfactory prescription in respiratory disorders, both of acute and chronic forms, will be found in The Tilden Company's Respirazone.

Syrgol—From the University Eye-Clinic at Jena, Prof. D. W. Stock (Director), come very excellent reports from Dr. G. A. Hegner, Senior Clinical Assistant, upon the results obtained from the use of Syrgol in conjunctival inflammation, especially gonorrheal conjunctivitis.

The favorable reports of Kolibrunner regarding the use of Syrgol in specific urethritis induced the ophthalmologists at Jena to make experiments with the new preparation. Hegner states that their results have been so gratifying that Syrgol is looked upon by them as a most valuable addition to the various means of treating suppurative diseases of the conjunctiva. He says that, where there is thickening of the eyelid with extreme oedematous swelling and the tissues become so hard as to render it difficult to inspect the diseased structures in order to confirm the diagnosis, treatment should be given with the purpose of allaying the inflammation and reducing the swelling of the lid. "Protargol, Sophol and Argyrol have in the past proved beneficial, but since our experience with this new salt, Syrgol, we regard it is superior in its ultimate results."—Hegner.

Syrgol is a brownish-black, odorless colloidal oxide of silver. Physically it consists of shining crystalline scales which dissolve in two parts of water. A five per cent solution is almost painless and does no damage to the cornea.

In twenty cases of gonorrheal conjunctivitis, he reports that gonococci disappeared from the secretions in a short time and speedy recovery took place in every instance. Three exceptionally severe cases are reported in detail, speedy recovery resulting in each instance. In the three cases described the most noteworthy feature was

the rapid disappearance of the gonococci and the prompt subsidence of inflammation.

Good results were also observed in many cases of ophthalmia neonatorum. By using Syrgol healing took place usually in about a week. In two cases recovery took place in four days, and seldom was it necessary to continue treatment longer than two weeks. An interesting fact that he mentions was that two cases which were not doing well previously showed rapid improvement when transferred to the clinic where Syrgol was employed.

Syrgol proved of much service also in cases of conjunctivitis following operation for cataract. Favorable results were obtained also in cases of inflammation of the lachrymal ducts. He mentions a patient suffering from an acute dacryocystitis in which there was swelling and considerable redness, together with feeling of pressure over the duct. The sac was washed out thoroughly with a one per cent solution of Syrgol and complete recovery followed in eight days. A similar result was obtained in a case where there was a purulent discharge from the lachrymal sac, but no inflammation present. Two such cases, of course, are not sufficient to enable one to draw positive conclusions, but they certainly indicate that good results in both acute and chronic inflammations of the lachrymal sac may be obtained by irrigation with Syrgol.

The manner of applying the remedy is quite simple. In acute cases of blenorhoea a five per cent solution is dropped into the conjunctival sac from two to three times a day, and the eye is bathed frequently with a solution of boracic acid in order to wash away accumulated secretions. In some cases it may be found advisable to use a two per cent solution.

The treatment of gonorrheal conjunctivitis is made easy because of the absence of irritation following the use of Syrgol. Instillation of this remedy in the eye and using an antiseptic solution as a wash is quite often sufficient to effect a cure.

Ideal Conditions of Serum Manufacture. If there is one therapeutic agent which, more than another, should be prepared with scrupulous care, that agent is diphtheria antitoxin. Its preparation should never

be entrusted to the inexperienced or to those who are hampered by lack of facilities. It should have its origin in the blood of healthy horses—animals whose blood is known to be pure. The welfare of the diphtheritic patient demands a serum from which every element of conjecture is eliminated. In the opinion of many physicians these essentials are best exemplified in the Antidiphtheric Serum of Parke, Davis & Co. Certain it is that this antitoxin is manufactured under conditions that are ideal. Miles removed from the smoke and dust of Detroit, hundreds of feet above the river level, the company maintains a large stock farm, equipped with model stables and supervised by expert veterinarians. Here, in the best possible condition, are kept the horses employed in serum-production. The laboratories in which the antitoxin is prepared, tested and made ready for the market are the admiration of scientific men who visit them.

Obstetrical Charts in Colors—Ten full plates 12x9 illustrating and briefly describing the following obstetrical positions. 1. Diameters of foetal head, pelvic brim and planes of pelvis. 2. Head presentations. 3. Mechanism in vertex presentations. 4. Mechanism in left occipito-anterior presentation. 5. Face presentations. 6. Mechanism in face presentations. 7. Right mento-posterior position. 8. Breech presentations. 9. Mechanism in Breech presentations. 10. Traverse positions. These plates will be sent in book form to any address on receipt of twenty-five cents postpaid. Battle & Co., St. Louis, Mo.

D. & R. G. R. R. Doing Big Things. Vice-President Brown of the Denver & Rio Grande Railroad, has authorized improvements, the cost of which amount to more than a million dollars. These improvements will consist principally of the substitution of steel and concrete bridges for wooden structures; concrete arches in place of culverts; filling up of high trestles on branch lines.

The gross expenditures will approximate six million dollars, of which two and one-half million will be spent for equipment and the balance on double track and improvement of terminal facilities.

Recently orders for sixteen Mallet compound locomotives of the articulated type

were given the American Locomotive Works of Schenectady, New York, and the Baldwin Locomotive Works of Philadelphia received an order for fourteen Mikado type freight locomotives. An additional order of six passenger locomotives will be placed within a few days and also a contract for seven hundred box cars, three hundred and fifty coal cars, one hundred stock and fifty cabooses. This equipment order follows closely placing of the order for thirty freight locomotives with the American Locomotive Company of Schenectady, New York, and Baldwin Locomotive Works of Philadelphia, Pa.

There is a very great activity along the entire line of the Denver & Rio Grande, between Denver and Salt Lake City; thousands of men being employed in betterments and new construction work.

Salt Lake City, Utah, will entertain a great many national conventions during the year 1912 and in the interest of the delegates and tourists, who will visit the Convention City by America's Dead Sea, the Denver & Rio Grande Railroad has just issued, for free distribution, a handsomely illustrated folder, descriptive of the noted scenic points along its lines between Denver and Salt Lake City, together with a list of hotels, cafes, theatres, clubs and points of interest in and around "The City of Zion." In the center of the folder is a map showing the street arrangement and giving the location of principal buildings, railroad offices, etc. The cover design is a very neat three-color effect looking through the giant portals of Castle Gate with Salt Lake City, by Great Salt Lake, in the background.

Meningo-Bacterin (*Meningococcus Vaccine*). Bacterin therapy is long past the experimental stage, and the immunizing effect of typho-bacterin, for instance, is thoroughly established, the results from its use being sufficient evidence of the worth of this method of controlling the spread of typhoid fever. Remarkable results likewise have followed the use of cholera-bacterin and it is hoped that equally good results will follow the use of meningo-bacterin in controlling epidemics of cerebrospinal meningitis. While immunization with meningo-bacterin has thus far been used in relatively few cases it is entirely

reasonable to believe that it will prove a most valuable aid in the suppression of epidemics of cerebrospinal meningitis.

Like the other bacterins meningo-bacterin is a suspension of the killed bacteria in normal saline solution (0.85 per cent). The cocci are grown upon a serum agar for about 24 hours, then washed off and suspended in salt solution. They are counted by Wright's method to determine the number of cocci in one cubic centimeter of the suspension, then killed by heating to 60 degrees C. for one-half hour. After dilution of the thick suspension with normal saline solution (0.85 per cent) so that the two strengths are obtained, the now completed bacterin is subjected to rigid aerobic and anaerobic tests to assure the absence of live germs or spores, Guinea-pigs are also injected to be certain that there are no harmful substances in the bacterin. Trik-resol (0.25 per cent) is used as the preservative.

Meningo-bacterin is polyvalent, i. e., a number of different strains of meningococci are used. Directions—The usual site for inoculation is the arm at about the insertion of the deltoid muscle. The dose is given subcutaneously and not into the muscle nor into the skin. An area about the size of a five-cent piece is painted with tincture of iodine. The syringe needle is plunged through this area. No after treatment is necessary.

The complete immunization treatment consists of three doses given at intervals of from five to ten days. The first dose is 500 million, the second dose 1,000 million and the third dose 1,000 million.

For children smaller doses should be used according to weight. It has been suggested that the unit of body-weight for a full dose be considered 150 pounds.

Meningo-Bacterin for Immunizing is Supplied in Two Distinct Styles of Packages. First—For immunizing one person there are supplied three syringes, each containing the proper amount for injection, designated respectively, first, second and third doses. The first syringe contains the initial dose of 500 million killed meningococci, and the second and the third 1,000 million each. The contents of the first syringe are to be injected as the initial dose, to be followed in five to ten days by the contents of the

second syringe and again five to ten days later by the contents of the third.

Second—For immunizing ten persons, meningo-bacterin is supplied in hospital or board of health packages containing 30 ampuls or ten complete immunizing doses. The initial doses (500 million killed bacteria) are contained in the ampuls with the red label, the second doses (1,000 million killed bacteria) in ampuls with the white label, and the third dose (1,000 million killed bacteria) in ampuls with the blue label.

In each case the first injection is 500 million (red label), the second 1,000 million (white label), is administered five to ten days later, and the third of 1,000 million (blue label) is injected five to ten days following the second injection.

No syringe is supplied with the hospital-size package, since it is expected that physicians using the same will employ their own hypodermic syringe, after sterilization. The method of withdrawing the vaccine from the ampul is to moisten the rubber top or cap with a drop of Liquor Cresolis Comp., U. S. P. or 5 per cent solution of carbolic acid; push the needle through the drop of antiseptic on the rubber cap, and then invert the bottle and slowly withdraw the required amount for injecting, following the instructions for the three injections necessary as directed.

The H. K. Mulford Company also supply Anti-Meningitis Serum prepared after the method of Flexner and Jobling, and they will mail upon request to the Philadelphia Office, Mulford Working Bulletin No. 8, on Anti-Meningitis Serum, giving a detailed and impartial review of the literature.

AN AMAZING ILLNESS.

Only a few months ago President Taft pardoned Charles W. Morse out of the Atlanta prison on the ground that he was "at death's door." It may be mentioned that the doctors who signed the certificate were

army physicians, and, therefore, part and parcel of the government. Within a few weeks it was developed that certain lawyers had received \$100,000 for services connected with the securing of the pardon.

Now we are informed that Mr. Morse has been in Montreal "negotiating with the Grand Trunk for a consolidation of railroad and steamship interests, involving the construction of extensive terminals at New London for the joint use of the Canadian road and Morse coastwise lines," etc., etc.

Surely, for a dying man, Mr. Morse is amazingly active, and for one who was reported "ruined," he is dabbling in rather high finance. Of a certainty, history records no such cure, and the medical journals could do no better than take up the case. Morse's sudden recovery, not only of health, but of money, comes close to being a modern miracle.—Rocky Mountain News, July 30, 1912.

Which leads us to patiently remark that when certain "ethical" doctors and certain "ethical" lawyers get together, there is usually something doing, and then some; again we say, three cheers for old over-worked "ethics!"

The British Colonial Druggist has the following in a recent issue:

"Mr. Samuel W. Fairchild, of Messrs. Fairchild Bros. and Foster, of New York and London, whose generosity in connection with pharmaceutical education has been of such great assistance to students both in this country and America, and to whose liberality are due the advanced lectures on the essential oils now running at 'The Square,' has been paying his usual spring visit to London. Mr. Fairchild has, with Mrs. and Miss Fairchild, been staying at the Carlton Hotel, and left Southampton by the German Lloyd steamship 'Kronprinzessin Cecilie' on his return voyage on Wednesday last."

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THE TOO LIMITED RANGE OF MEDICAL EDUCATION.

J. K. MILLER, M.D.,

Greeley, Colo.

The universe is large and contains many things of interest to the human mind. There is much easily understood—there is also much easily misunderstood. Science does not bring to us positive truth. It does, however, bring to our understanding much that is marvelous. It brings to our understanding the wonders of life's activities in both the vegetable and mineral kingdoms. Our whole environment is made up of what we regard commonplace things, yet we stand amazed at their gross construction, their habits, their functions and their powers when we stop to investigate carefully. Even greater surprises await us on minute analysis. The tiny cell of organized protoplasm stands as the most mysterious mechanism that has ever quickened human thought. Its origin ever remains in the realm of the unknown. It is constructed and vitalized by life—the most subtle of all influences. As observed in the plant, the cell has the power of absorbing the moist inorganic soil, converting it into new protoplasm, into starches, into sugars, resins and oils.

In the animal organism, it is also the definitely constructed protoplasmic cell. It is the mysterious unit of developmental activity. The growth of the fertilized ovum into a creature having a bony framework with organs composed of various tissues, as the brain, viscera, and circulatory system, organs whose functions are widely different, is startlingly mysterious. How apparently unknowable is the mystery of life, of thought, of action and of death.

In the whole system of created things, we find man the greatest achievement of the Creator mind. While at his advent into this world, he is the most helpless, yet in his nature, in his construction, intelligence and power, he is vastly superior to all creatures. Because of his endowment with intellectual and spiritual faculties, and because of his freedom to act at will in the realm of morals, he is held accountable for his doings in relation to his fellow-man and for the respect shown the Author of his being. His superior powers rise above the instincts of the lower animal and are manifest not alone in matters of moral import, but in the protection and provision for his various needs, both personally and socially considered.

The Paul of sacred history has written many things that much of the popular world of today is slow to accept, yet his analysis of man is both classic and scientific. He declares man to be composed of three parts—body, soul and spirit—the soul being the intellect. The analysis is unique: In none of these parts is man perfect, for in them his activities are neither constant nor infallible. He is prone to go wrong in his spirit, in his mind and in his body. With this analysis before us, we readily see that man is not all body, nor is he all intelligence; it takes both to make human nature.

At birth man is blind and deaf, without mind and without the power to will. The intellect is then but a dark chamber, because the windows which are the

*Read before the Weld County Medical Society.

senses of the body, are closed. The five—or seven—senses are the only avenues through which the light of information can reach the intellect or mind. Without them, man would not be conscious of his relation to the material world. He would not be conscious of his own existence. Material brought in through these avenues of sense the mind analyses. A mental perception arises, forming the basis of a mental concept—*notion*, image or idea of things.

Much of the product of this wonderful mind laboratory goes back through some of the same sense avenues to the body, consciously and unconsciously influencing its growth and development, as well as directing its movements. The inter-relation of body and mind is thus seen to be positive and intricate. That the influence of one upon the other is mutual and common, must be recognized. This influence as exerted upon the mind is crude, while that of the mind upon the body is refined, of a higher order because the product of a correlated intelligence. The higher position of the mind may be observed in a practical way when we consider that, physically speaking, it would be easy for one person to fill the place of another, but mental acquisitions are so varied that it is exceedingly difficult to substitute one mind for another. The mind is much more susceptible to change and more readily modified than is the material body. The cannibal's food will not change the general contour of the English-bred child to the type of the savage, but the cannibal's teaching and association will warp his mind, change his language, his morals, his religion, his politics, his ideals and his aspirations. This is due to the fact that mind can only build according to the quality and quantity of material brought to it. It is thus modified most readily in essential ways through the material brought by the body senses, while the body retains its peculiar characteristics more or less, regardless of the character of the food supply.

Evolution teaches, though it has not proven, that man has come up from the lower animal; that he is an animal with various organs which have various functions is universally recognized. He is all this and very much more. Our medical schools teach that he is a physical being with a soul in him somewhere; that the body is a primary and influential factor; that the important thing to know in order to practice medicine intelligently is the various structures, tissues and organs and their functions. The mind with its hidden influences is kept in the background. Being abstract, it does not receive a corresponding emphasis. The student finds the physical organism much more tangible. It appeals more readily to him. While the brain and nervous system are carefully mapped out and analyzed, the psychic influences which operate through them are so mysterious that they receive, comparatively speaking, but incidental consideration.

That it is essential to know the various organs of the body, the character of the tissues and the general physical construction, is conceded. It is, however, quite as important to know that the mind is an organ of a higher order and one having a more powerful and extended influence than any other, for man is a soul with a body.

Just here, allow me to turn aside to say that I have not and will not refer specially to the third and highest part of man's being, which is the *pneuma* or spirit, though I do not wish it understood that the spirit is without its influence upon both mind and body. It is the eternal part of man and is closely associated with the other parts of his being. It has, however, an intelligence of its own. It has the power of existing independently of mind or body.

As above stated, man is neither perfect nor infallible in any of the parts of which he is composed. These parts differ in their character. When one goes wrong, it goes wrong in a way peculiar to its character. However, be-

cause of their union and their intricate and sympathetic relations, a derangement in one is carried or referred in some way to the others. In health they harmonize perfectly and a sense of well-being pervades the whole organism. For man to reach his full stature, he must be developed symmetrically in all three parts. It is intuitively recognized, but very insufficiently taught, that the higher presides over the lower. It is not uncommon for a person to speak commandingly to himself. David of Holy Writ often used expressions such as, "Why art thou cast down, O my soul?"—the spirit speaking to the mind. Paul says, "I keep under my body and bring it into subjection"—the mind controlling the body. Patients often tell us that they say to themselves that such and such things are not true; that they try to make themselves believe that things are thus and so. That these commands go out from the higher intelligence is evident. It is also evident that this higher intelligence has authority.

Our experience and observation point to the conscious and unconscious influence of the higher faculties over the lower. The organs and senses of the body live and act so long as vitalized and so long as influenced by the ego. To ignore the ego or to put the body on a par with it in importance, is practically to adopt the faith of the Mohammedan, who holds that the body is with the soul transported into the other world, where its senses and passions are gratified to their full capacity.

We desire by this discussion to remind ourselves as physicians that everyone who applies for relief is not a simple but a complex problem; one whose solution is not necessarily found in his material parts; that he must be regarded as something more than a creature vivified with animal life. We must not forget that every organ in his body may be sound and free from disease and yet he be a great sufferer, needing our most serious attention.

In order to care intelligently for a large class of sufferers, we must cease to be solely materialistic in our professional work. We must learn to minister readily to the higher faculties, using such remedies as they can appreciate. There are mental difficulties which have their origin in some bodily organ. There are also many which are peculiar to the mind alone. If we find upon examination that our patient has no physical derangement, we must not smile and tell him there is nothing wrong. The fact that he has applied for treatment is positive evidence there is organic or functional derangement somewhere. The wheels, weight and pendulum of the clock may be perfect, but the hands upon the dial point wrong because the adjustment is disturbed by a wheel slipping a cog. It is quite as true of the human mechanism. When the adjustment of mind and body is disturbed, great discomfort, even serious conditions, arise. These conditions should be recognized, for they are present in cases wherein material remedies avail nothing. To prescribe drugs to many of a large class suffering from psychoneuroses, is not only useless, but is unintelligent, unscientific and often dishonest.

Pathological disturbances of mental activity affect sensation, affect thought and affect organ function. These conditions may arise also from other sources. The sense of hunger, of thirst and nausea, may come from functional and pathological conditions of the alimentary canal. They may come from a toxicity of the blood stream. They may come from brain irritation and brain injury, and they may result solely from mental impressions. The average physician readily appreciates this. He appreciates the influence of the body upon the mind, but fails to recognize sufficiently the extent to which mental influences may affect the body. He becomes prejudiced toward any attempt to recognize the mind's influence beyond the customary limit.

When unable to find any organized derangement, the physician, not quite sure of himself, feels that nevertheless some obscure difficulty must exist. He has been so taught and in ignorance will draw his bow at a venture in prescribing some kind of tonic or eliminant. Such acts, however, are without justification. They must be charged up to ignorance or dishonesty. Believing the average physician is honest, we conclude that when he is guilty of thus imposing upon his patients, he is ignorant—is ignorant because of the “too limited range” of his education.

A limited, narrow course in the art of healing is expected of the heterodox schools. They are in their practice sort of specialists because of their limited knowledge and limited means. They are offshoots from the stock of regular medicine. The regular, however, has no defense to put up. He professes to cover the whole ground intelligently, but he fails, and knows it. More than that, he has not had the courage to acknowledge his shortcomings. He is prejudiced against the unorthodox competitor who may come into his territory and takes care of the work he has neglected. His prejudice is well grounded if viewed from the standpoint of qualification and ability, but if he neglects his business and an outsider comes in and cares for it satisfactorily to those most concerned, it is time for him to drop his prejudice and get busy. To overcome the great, growing army of irregulars is a problem, the solution of which lies in the recognition of facts; facts which have heretofore been in an important degree ignored, if not denied.

We of the old school have advanced along the lines of surgery, quarantine and sanitation, and our work in the medical laboratory and in the development of vaccine and serum therapy is marvelous. In these particulars, the general public has confidence at our hands. We have, however, in our methods of cure adhered so closely to the use of materials that the general

impression is that we do not know to use other things. We intuitively recognize this fact. To quote from a paper of the writer read before the state society six years ago: “We are endeavoring to meet part way the public demand with our placebo tablets and our colored, inert liquids, but we cannot through them secure the recognition as do the Divine Healer and the Christian Scientist, who so ostentatiously pose as special servants of the Lord and claim to have the faculty of adducing a power yet unknown to science.” When all doctors fail, why should not the patient feel the need of Divine assistance? I say naturally, because man is spiritual as well as mental and physical; therefore worshipful, and turns in his dire extremity to Him whom he regards the source of all power.

It is useless to quarrel with these people. So far as it concerns their case, medical science is a failure. They greatly feel the need of Divine care. This is shown in their willingness to wade through the absurd literature, so-called, projected for their use by the Christian Science and kindred faiths. The human mind has not yet been educated beyond sinking the art of healing into the realm of mystery. With all our progress, any system of healing, if it would succeed, must, like religion, have mystery as an essential element. This fact indicates the value of having the sympathy of the mind enlisted in behalf of remedies used.

The laity has a much more general knowledge of the sciences and professions than formerly. This is particularly true of medicine. The newspapers delight to spread before their readers fascinating descriptions of various diseases and their remedies. The patent medicine circular and the information-giving doctor do the same. The people are made thereby to feel sufficiently informed in respect to many conditions, that with a little help from a patronizing druggist they can intelligently care for themselves. This custom of self-

treatment together with the recognition received by the irregular pathies whose practitioners are largely laymen, show a trend away from a specialized profession. Therefore, as in the case of the clergy, the doctor is losing in his community much professional appreciation—an appreciation which is more or less essential to his success.

When in these new departures, there is among the most successful ones a strong religious element, as in the Emanuel Movement, Christian Science, New Thought, Divine Healing, the indication is strong in the direction of the old time period when the art was vested in the priest and clergy.

These things are cited to show that the mental element in the treatment of disease must receive a more thorough and more extended recognition. It is the prerogative of the regular school to lead in this matter. Instead of the haphazard indifference now shown, the mental feature of medical practice must be given that consideration to which it is entitled. It is both intelligent and scientific. That this has not been done long ago is because the reach of its power has been ignored. We have yet to realize the full value of mental influence; that when we contend against it because it has been held up by unworthy hands, we are contending against a stubborn fact—a fact proven by our own experience; a fact we see demonstrated in our patients. We see it in others and we see it in matters other than professional.

When we think seriously, we can scarce understand why this valuable weapon of our armamentarium has been so little used. The effects of a thought expressed in words will surprise the one who stops to analyze. A thought is a mental act. Expressed in words, it becomes a series of physical responses combining the action of the chest, vocal chords, tongue and lips. It may not stop here. It may make one blush, having caused the dilatation of a large group of blood vessels. It may cause one to

become pale, causing the group of blood vessels to contract. It may make one cry, causing the lachrymal gland to work. It may take one's appetite by disturbing the mucous membrane of his stomach. It may make one perspire by affecting the glands of the skin. It may make one tremble by its influence upon the muscles of the body. In short, any cell of the organism may be thrown into excitement by a simple action of the mind expressed in words.

As a superstitious faith is impotent to build true character, so wrong principles are quite as impotent to build a successful system of healing. When our remedies constantly fail us, in cases where others with other means are making a success, we must be big enough to drop prejudice and adopt the successful remedy regardless of its source. This is honest, just and best in the end. We have often found ourselves administering drugs doubtful as to what the effects will be, but we give them on the recommendation of acknowledged authorities or because educated so to do. Our education has not sufficiently taught us the possible appropriateness of other things. Common sense has shown the value of rest, good food and pure air, but there are many indications which neither they nor drugs can meet. In many forms of psychoneuroses, dependence upon these things alone will meet with failure, because the appropriate and scientific element in their treatment is omitted.

Until recently none of our medical schools has made an attempt to round out the student's education in respect to the very important field of mental therapeutics. One, however, has had the courage to put in a chair of psychotherapeutics. All other reputable schools must follow. Present day requirements will force them to do this. Drug remedies have a more restricted field of usefulness than was at one time thought. The profession is becoming more and more ready to recognize this fact. It is slowly accepting the value,

not only of psychotherapeutics, but mechanotherapy as well. That is necessary to hold prestige. These things must be emphasized in the earlier school life of the medical student. This can now be done without shocking the ethics of the profession, since our post-graduate schools are rapidly preparing the way.

Many things are being done wrong by the regular physician, and he knows it, for his repeated failures tell him so. He knows it also because others succeed at the point at which he fails. Not infrequently these successes are at the hands of certain competitors whom he regards as ignorant and unqualified. To illustrate: For generations, the profession has prescribed material remedies for constipation, and yet with all our boasted progress in medicine we have not a single successful drug remedy for this trouble. Our constipated patient applies again and again for relief and is sent away with the same or a modified prescription. This is done because the physician has not been

taught anything else. If forced to vary his treatment, he recommends to the patient a Davidson, a Fountain or a Cascade. He does all this with an easy cure in reach. This cure he fails to use, either because he is ignorant of its value or is prejudiced against it because it has been adopted by some who are not of his clan. This illustration does not stand alone.

Let us continue to use drugs where it is scientific to do so. Let us get away from the thought that in drugs we have a panacea for all ills. Let us remember that the prescription pad is out of place in no small percentage of cases of psychopathology. Let us not forget that mental influence extends to every organ and cell of the body. Let us be big enough to accept the true remedy without regard for the source from which it hails. Let us remember that authorities have prejudices which lead them to give expressions more theoretical than practical. Let us remember that we ourselves, if true, aspiring physicians, have a right to opinions of our own.

THE RELATION OF THE HOSPITAL TO THE PUBLIC.

E. STUVER, M.S., M.D., Ph.D.,

Fort Collins, Colo.

Address delivered before the Fort Collins Training School for Nurses,
Graduation Exercises, May 3, 1912.

In our very complex and intricate modern civilization many agencies are at work to make mankind happier and better. But of all the factors which are contributing to the world's health, progress and well being none occupies a more unselfish and honorable place than the hospital. By relieving pain, curing disease and saving life, the properly conducted hospital is one of the most typical representatives of Christ-like work that we have today. I say this advisedly and without in any way trying to minimize or belittle the many other agencies for good and human uplift that are in operation all

around us. In the hospital many of the blind are made to see, the deaf to hear and the dumb to speak; the crippled, the maimed and the deformed are put on their feet and sent on their way rejoicing; prattling, cooing babies and laughing, romping, rosy-cheeked boys and girls stricken by some fell disease, are snatched from the jaws of death and restored to their agonized parents; the blooming maiden is saved for her lover and the strength of the lover's arm is renewed to protect her and to fight the battles of life for his sweetheart; the loving mother is brought out of the very valley of the shadow of

death and restored to health and strength to assist and encourage her husband and to cherish, guard and direct her children; the father, on whom the very lives of the wife, mother and children depend, is rescued from some disease or injury that would have ended his life; and thus we find through the whole range of our social life from the regal palace to the lowliest cottage,—nay, even the most degraded hovel in the land—the beneficent activity of the hospital extending to all.

But lest any of you should fail to grasp the true significance of these statements and fail to appreciate the importance of the work—direct and indirect—that is being done by the hospital, I desire to call your attention to a few facts:

1. Since a great variety and number of diseases are brought together in the hospital, there their symptoms can be studied in a more thorough and systematic manner and the most effective and approved methods of diagnosis and treatment carried into effect better than anywhere else.

2. The hospital is the only place in which the medical student and the nurse can receive that thorough and well-rounded training and education that make them first-class physicians and nurses and fit them to enter upon the duties of their professions.

3. After engaging in the practice of his profession, the most arduous and exacting in the world, connection with the work or teaching done in a hospital stimulates and arouses a physician to do his best; in order to keep in the van of progress he must be a student or investigator, or both, and this naturally leads him to contribute the results of his work to the journals of his profession, and brings him in contact, directly or indirectly with others who are doing similar kinds of work.

4. In this manner a craving for greater knowledge and efficiency is created and he joins medical societies and attends their meetings, takes part

in the discussion of subjects there presented, and also attends post-graduate courses to get broader views and acquire greater efficiency and skill.

5. Then, too, the work done by physicians as instructors in our training schools for medical students and nurses, like mercy benefits both those who give and those who receive; it causes the physician to make a more careful and accurate study of the subject under discussion than he would otherwise do and it prepares the student for his calling and the nurse for her soothing and life-saving vocation.

6. I believe that everyone will instantly perceive that all these things make better physicians in every way and that the good results are not confined to their work done in the hospital, but that every patient that they see and treat in private practice receives the benefit of this increased knowledge and skill.

7. The hospital is the center for accurate and systematic instruction and training in the principles of hygienic living; and this applies not only to the resident physicians and nurses, but also to the patients who are patrons of the institution, and their friends who visit them there. Here many lessons in cleanliness, personal hygiene and measures for avoiding contagious and infectious diseases are taught in an objective way and strongly impressed on the patients and their friends who leave the institution to become centers for better hygienic living and radiate the gospel of health to those around them. Why, even the patient who grumbles and complains that he was starved in the hospital, on more mature reflection will admit that he has learned a good lesson and that his ills were to a large extent probably due to improper and intemperate eating and drinking, or both.

8. Here, too, in the hospital is engendered that spirit of research and investigation that impels men to devote their lives to finding out the causes of dis-

eases and the best means of preventing or curing them:

(a) Stimulated by the spirit and example of John Hunter, one of London's great hospital surgeons, Jenner was led to devote over twenty years of his life to the discovery and perfection of vaccination for the prevention of smallpox. His labors were crowned with complete success, and that dreaded disease which had swept like a devastating angel over the world, destroying millions of lives, is now under perfect control and smallpox stamped out wherever vaccination is properly used. During the 100 years from 1,700 to 1,800 A. D., one hundred millions of people lost their lives from smallpox in Europe alone; and where the scourge then left a trail of horror and death, it now scarcely exists at all.

(b) Aroused by the researches of Pasteur, Lister was convinced that the deaths due to septic poisoning following wounds and operations are caused by living germs and could be prevented. In connection with his large hospital service he undertook an extensive series of experiments to prove his belief, and it is needless for me to remark that his efforts were crowned with wonderful success and that his antiseptic treatment of wounds and its application in surgery and obstetrics was at once followed by a great reduction of mortality and the saving of thousands of lives every year. Indeed, modern aseptic surgery has reached such a degree of perfection, that operations which even 25 or 30 years ago would have been regarded as almost certainly fatal, are now attended with very little danger.

(c) It was the same spirit of scientific research and love of humanity that led Robert Koch to devote his marvelous powers to searching out the causes of diseases and led to such wonderful results. His discovery of the bacillus of tuberculosis and his demonstration that it is the cause of tuberculosis or consumption, alone has done more good to

humanity than all the conquerors that have ever graced (or more properly speaking, disgraced) the pages of history.

(d) Nor have these great achievements been confined to foreign countries. Our own devoted workers, Reed, Carroll, Agramonte and Lazear, who imperiled their lives and two of whom became martyrs of science in their search for the means by which yellow fever is spread, furnish one of the noblest examples of self-sacrifice in the history of our race. Their demonstration that this dread disease is conveyed solely by the mosquito has done more to open up and make the tropical regions of the globe habitable for civilized people than all the wars since the dawn of history.

(e) What made it possible to build the Panama canal? It was not the money of the United States; it was not the genius of Col. Goethals, the great engineer, nor was it the wonderful sanitary knowledge and administrative ability of our own Dr. Gorgas, who has converted the canal zone from a pestilential death trap into a veritable health resort, but it was the work done by those devoted martyrs of science, who showed us how to stamp out yellow fever by getting rid of the particular kind of mosquito, the *Stegomyia Calopus*, that conveys the disease to man; kill off these mosquitoes, or screen the yellow fever patients, so that these mosquitoes can not get at them and become infected, and you will have no more yellow fever. That this can be done is conclusively shown by Havana, which formerly was a regular pest hole, but now is free from the disease; the same may be said of the Panama canal zone.

(f) The same thing is true of malaria; the patient, long continued investigations of Laveran, Ross and many other workers have shown that this dread scourge which has caused the loss of millions of lives and untold millions of wealth; that has converted some of the richest and fairest parts of the

the earth's surface into desolate wastes or infernos of disease, is caused by a germ, which is conveyed to man only by another species of the mosquito—*anopheles claviger*. Armed by this exact knowledge as to the cause of the trouble, sanitarians are preparing for the conquest of the hitherto pestilential or death-ruled portions of the world, and the marvelous fertility of the soil and the undreamed of wealth that their transformations will bring to the world ought to touch even the pocket nerve of the great financiers who can be reached in no other way.

When we think of the six hundred thousand lives lost every year from preventable diseases that could be saved if these diseases were properly understood and controlled, it should arouse every one of us, physicians and laity alike, to work for the immediate establishment of a department of health by our National Government, whose business and duty it should be to adopt proper meas-

ures for stamping out these diseases and saving these lives to join in the great procession of our country's progress and happiness. A short time ago we were all shocked and horrified by the wreck of the Titanic and the great loss of life that it caused. Why, then, do we sit idly by when more lives are lost every day of the year from preventable diseases than went down to death in the Titanic? Why is it that this great and intelligent people does not rise in its might and crush the hordes of superstition, selfishness and greed that are using every argument and weapon in their power to prevent the adoption of the greatest conservation measure the world has even seen—the establishment of a department of health for the eradication of human diseases and the saving of human life. If you want to help this great work along, write to your United States Senators and Congressmen and ask them to vote for the Owen Bill, Senate Bill 561.

ETHER VS. NITROUS OXIDE AND OXYGEN ANESTHESIA.

DR. JOHN W. SEYBOLD,
Denver, Colo.

An article appeared in the *Journal A. M. A.*, February 17, 1912, by Dr. J. G. Gwathmey, New York, entitled "up-to-date Methods of Anaesthesia." He tells us that the vapor method of giving chloroform and ether is safer than nitrous oxide and oxygen.

This cannot be true if the investigations of such men as Drs. Everett A. Graham and Robert H. Ferguson ("Opsonic Index in Relation to Surgical Anesthesia," E. R. Squibb & Son) are credited, for it was shown that chloroform and ether cuts up the lecithin of the blood, thereby lowering the opsonic index. We all recognize the fact that the most trivial infection, such as would not cause the least disturbance in the normal blood, would be serious in this depressed environment. In order to get

surgical anesthesia it is absolutely necessary to administer enough ether to get relaxation. This can not be done without lowering the opsonic index. This results in a depression lasting from two days to several weeks.

The laboratory investigations of Drs. Walter E. Humburger and Fred E. Ewing of Chicago, "Blood Changes Incident to Surgical Anesthesia," read at Chicago session A. M. A., June, 1908—show that nitrous oxide produces no change of clinical significance.

Dr. George W. Crile, of Cleveland, in his experimental and clinical research into nitrous oxide vs. ether anesthesia (*Southern Medical Journal*, January, 1910), says that the nitrous oxide dogs withstood shock far better than those under ether, and especially was this true

of handicapped animals reduced by infection, hemorrhage or hyperthyroidism, for here the advantage of nitrous oxide was very marked.

This then shows us that nitrous oxide is a superior anesthetic in the laboratory. Now, the question is: What are the results obtained in the clinic when in the hands of those who understand its administration? Can sufficient relaxation be obtained for surgery on any and all parts? To this I would say that I have successfully administered this anesthetic for such operations as gastro-enterostomy, hysterectomy, appendectomy, herniotomy, tonsillectomy and amputations. These operations were all done with gas and oxygen—at times a little ether was used as a respiratory stimulant only. They varied in length from one-half to two hours.

Nitrous oxide is a true anesthetic, and can paralyze the respiratory center and thereby cause death. It does not asphyxiate the patient when used with the oxygen.

The popular idea that the ether has an anesthetic action which gives us the relaxation, I believe to be wrong, because I do not use more than one ounce in two hours. I found that the proper combination of gases gave me relaxation, and this can be brought about much quicker than with ether. So now I use the ether as a respiratory stimulant, and depend upon getting enough nitrous oxide into the blood for my anesthesia.

Dr. Freeman Allen of Boston, *Journal A. M. A.*, February 10, 1912, says he had a death under nitrous oxide and oxygen which he attributes to the anesthetic. He says the patient was profoundly uræmic, almost pulseless. Man about to be operated for decapsulation of kidney. After about four minutes of inhaling the anesthetic, the oxygen indicator standing at "5," the patient died before the incision could be made.

We must not forget that we can cause death by faulty technique in adminis-

tering this anesthetic, as well as with any other anesthetic. First, we can induce primary cardiac failure by excessive respiration. (Yandell-Henderson, *Surgery, Gynec. and Obst.*, XIII, 161.) Second, we can paralyze the respiratory center, and yet the muscular tone or expression of the face up to within a few seconds of the paralysis will be deceiving, hence the necessity of being able to instantly recognize any change that is taking place.

As to the oxygen indicator pointing to "5," I would say my experience and observation leads me to believe that this is where the majority make their mistakes when taking up the study of this anesthetic. They have an idea that if the indicator shows five or seven per cent that the patient is getting enough oxygen. It might be so if there was enough pressure to force the oxygen over the valve and to the patient. But if the patient is weak and respiration shallow, little or no pressure on the oxygen, the patient would get just enough oxygen to deepen the anesthetic nicely, and would quickly be anesthetized to death. We must feed the oxygen according to the patient's condition, whether it be "5" or "45" per cent. I pay no attention to the oxygen indicator, but watch my patient constantly. I try to account for every lost respiration.

I know of an anesthetist who is considered a skilful man, who attempted to administer this anesthetic after having seen one case. He failed completely and, of course, the anesthetic was considered at fault, as the anesthetist was a man of ability. I cite this case in order to show that it is absolutely necessary to make a study of as well as to see the application of this anesthetic in order to handle it intelligently. Skill with other anesthetics does not suffice. The wonderful results obtained in Dr. Crile's clinic and the great skill of Dr. Teter of Cleveland are due to the fact that it is applied daily and its action is studied carefully. This skill is so

highly developed that it is possible to fit all patients to this anesthetic and yet get a good anesthesia, providing the proper pre-anesthetic agents have been administered in time to get the benefit of their action. I am administering this anesthetic every day and have a chance to observe its effect and improve my technique in the combining of the gases. To this fact I attribute my success.

The majority of cases operated with gas and oxygen as the anesthetic here in Denver have been moribund, and ether and chloroform were out of the question.

A case which will illustrate was a young man who had been anesthetized with ether twice previously. The first time nausea was very severe and pneumonia set in, and the second was even worse, for respiration ceased and it required twenty minutes to restore him. He was then put to bed, as the surgeon decided to abandon the case. It was finally decided to try nitrous oxide as a last resort. Patient presented a dilated heart, so it was decided to bring on anesthesia very slowly in order to avoid over-taxing it. He took the anesthetic very nicely and was operated for hernia, operation lasting thirty-five minutes. He made a quick recovery, and there was no nausea or post-operative complications; shock was not in evidence.

Now, it seems that nitrous oxide and oxygen have been called upon many times to do this same thing. Dr. C. B. Parker of Cleveland says he has operated over four hundred cases, all of which were unfavorable to any anesthetic, such as organic diseases of heart, lungs, kidneys, alcoholism, accident and shock, extreme age, feeble and exhausted patients. Complete surgical anesthesia was maintained continually from thirty minutes to one hour and fifty minutes without developing any alarming symptoms in the patient. They came off the operating table with pulse improved, perfectly conscious, without vomiting, and little or no shock. He

goes on to say that this is the only anesthetic he would personally take. This is what some of the surgeons of Denver say who have gone so far as to consider the possibility of some day having to submit to an operation. In fact, two have already arranged to be operated within a few days, and one of them operated the case before mentioned that was abandoned with ether and taken up with nitrous oxide and oxygen.

Ether produces good operative conditions, but it is very unpleasant to take; it is conducive to bad and at times fatal post-operative conditions, while gas and oxygen possess all the good points and none of the bad, and yet we are safer according to laboratory and clinical results.

Dr. Gwathmey advocates the giving of an enema of warm olive oil immediately after the operation. This is to replace in part what the ether or chloroform has destroyed in the blood. Now, it takes some hours for this absorption process. Why not avoid this depressing of the phagocytic action by using gas and oxygen, and still use the enema of olive oil to enrich the blood and raise opsonic index above normal.

Now, it seems that the chief objection to this anesthetic is the cost, but should this be given a second thought when we stop to think of the many advantages it has over the other anesthetics? It is pleasant for the patient, quick and safe in action, does not cause nausea or depression, and the patient can take nourishment in a few hours, thereby shortening his stay in the hospital. Patients awaken on the operating table and are in full possession of the faculties, and do not have to be watched when put to bed. Last but not least, there is a wonderful absence of shock in long operations. All patients that we have administered gas and oxygen to, who have had previous experience with ether or chloroform, recommend this and almost insist that their friends select this anesthetic.

632 17th Street.

REPORT OF AN INTERESTING CASE OF MENINGEAL HEMORRHAGE IN A NEWLY BORN INFANT, WITH RECOVERY.

MORRIS J. KROHN, M.D.,

Denver, Colo.

Mrs. F. S., age, 26; housewife; ill-para; absence of any neurotic history; confined July 12, 1912.

Child, female; born after a very much prolonged labor; face presentation (L. M. A.), the head being subjected to a great deal of pressure; cord twice around the neck; asphyxiated at birth; was resuscitated only after considerable effort; head was very much out of shape on account of the moulding and mal-position; cry was very feeble, but the child otherwise apparently healthy, 18½ inches in length and weighing 6½ pounds.

Six hours after birth the child became very cyanotic, fell into a stupor, frothing at the mouth, and had convulsions. At this time the head became so much extended that the occiput was almost in contact with the child's back; the pupils were dilated; fontanel bulging; body rigid; clenching of the hands; knee reflexes normal; temperature normal; pulse feeble and there was trouble in urination.

These symptoms persisted for four days, stupor and convulsions continuing the entire time, the infant having about sixty convulsions in the four days. On the fifth day, however, the convulsions ceased, but the child remained otherwise the same, and a very unfavorable

prognosis was given. At the end of the sixth day, the cyanosis gradually began to disappear, the stupor and rigidity lessened, the opisthotonus became less pronounced, and the child gradually recovered and is doing well.

Diagnosis: In the above case, it was only necessary to make a differential diagnosis between meningeal hemorrhage and meningitis. In the former we have a sudden onset, stupor occurring early, usually on the first day, gradually diminishing in cases of recovery or deepening into coma in fatal cases. There is no fever in the beginning and only moderate fever at the close. In acute meningitis we usually have a higher temperature, especially early in the disease, the stupor and coma developing later and the rigidity of the body and extremities less pronounced.

Treatment: Consisted in keeping the bowels open; cold applications to the head; child constantly stimulated by the use of brandy; was given mother's milk by means of a dropper, as the child was too weak to nurse; the first four days, however, gavage had to be resorted to, as the child could not swallow; was kept on oxygen continuously for the last three days; lumbar puncture was not made.

SOME NEWER CONCEPTIONS OF INFECTION AND IMMUNITY.*

EDWARD C. HILL, M.D.,

Denver, Colo.

Protein foods are normally broken down into less complex products before absorption from the small intestine into the blood. When injected directly into the blood current, they

act as poisons, large doses producing collapse, coma and even death. Abnormal permeability of the intestinal mucous membrane in certain individuals may account for absorption of the

*Read before the meeting of the State Science Section at Greeley, March 22, 1912.

unchanged proteids in eggs, buckwheat, mussels, oatmeal, berries and other foods, giving rise to itching hives, joint pains, fever, difficult breathing and nervous symptoms. The bites of venomous reptiles and the injection of horse serum or diphtheria antitoxin may cause similar symptoms of complex protein poisoning.

If 0.1 cc. of horse serum (or other foreign protein) be injected under the skin of a guinea pig, and the dose be repeated after 7 to 9 days, the animal becomes very sick, with evident distress, quick, shallow breathing, convulsions, paralysis, collapse and death. The toxic sensitization is a reaction specific for the particular substance first injected, and if the animal survives it is rendered immune to this protein for a time. The period of incubation is the time which must elapse after the first, or sensitizing, dose, before the second, or intoxicating, dose will produce symptoms. This period varies from one to three weeks, averaging from 10 to 14 days, which is the usual time for the incubation of acute infectious diseases in humans. Occasionally the injection of horse serum, or of diphtheria antitoxin, which is largely horse serum, produces urticaria, joint pains, difficulty in breathing, shock and sudden death. This tragic outcome is most to be feared in those who have been given a previous injection at least one week before, and in the subjects of hay fever and asthma, who are notoriously susceptible to the odor of horses. That susceptible persons may absorb through the lungs enough horse protein, from mere proximity, to become sensitized, would seem to be proved by recent experiments made by Rosenau and Amoss. Human breath was condensed and collected, free from saliva, in water, and the fluid was then injected into guinea pigs. The same animals were given doses of $\frac{1}{2}$ to 1 cc. of human blood serum two or three weeks later, and

more than one-fourth of them developed dangerous and even lethal symptoms.

The term anaphylaxis, which is the antithesis of prophylaxis or prevention, has been applied to the above outlined condition of hypersusceptibility of an organism to a strange protein. This condition, when not fatal, is a step toward prophylaxis or immunity. For example, should tubercle bacilli become lodged on tissue in a state of anaphylaxis, then the protecting agencies of the organism are concentrated where they are most needed (Grinnan), tending to encapsulate and so limit the process. The reactions excited by the various tuberculin tests are anaphylactic in nature. The administration of tuberculin in small doses ($\frac{1}{10000}$ m. g. and up) in gradually increasing doses in tuberculous subjects, by developing anaphylactic resistance may lead to immunity and cure of the disease.

Tissue changes in the human body, with evolution of heat and energy, take place largely, if not wholly, through the agency of ferments, most of which are reversible in action. Thus the same enzyme lipase, which converts fats in the intestine into glycerin and fatty acids, reverses its activity in the tissue fluids, where the dissociation products are in excess, and synthesizes these into neutral fat, which is deposited under the skin and about the viscera, again to be broken down during starvation by the direct action of the fat-splitting ferment.

Vaughan's explanation of anaphylaxis is as follows: When a complex foreign proteid (such as egg albumen) gains entrance into the body as such, certain body cells are called upon to develop a proteolytic enzyme which will act upon this foreign proteid in the circulation and split it up into simpler compounds available for body use. The development of this new

enzyme in the body is gradual, hence the poisonous cleavage products are not present in sufficient amount at any one time to give rise to symptoms. When the foreign proteid is disposed of, this new enzyme is stored up in certain cells of the body as a zymogen, or latent enzyme. A second injection of the same proteid reactivates this zymogen, the enzyme is liberated in comparatively large amount, quickly cleaving the foreign proteid in sufficient quantity to give rise to toxic symptoms or even death. The important difference between bacteria and dead proteid in the circulation is that the germs multiply rapidly, so that by the time (period of incubation of disease) their special enzyme is fully developed, their numbers are so great as to furnish a large amount of toxic cleavage products in a short period of time, diminishing slowly or rapidly according as the disease terminates by lysis or crisis.

Everybody knows that one attack of an infectious disease usually protects the individual from subsequent attacks. The relation of this fact to the above theory of anaphylaxis (sensitization, hypersusceptibility) lies in the stored up special zymogen, which quickly destroys the invading bacteria before they can multiply in sufficient numbers to cause derangement of body functions. In other words, the cells of the body are now on guard with plenty of ammunition of the kind required to exterminate these particular enemies. In a nutshell and with variations and additions, the ideas above mentioned constitutes what appears to me to be a good working hypothesis of the rationale of infection and immunity as understood today.

The phagocytes, or white blood cells, were long since shown by Metchnikoff to be important factors in immunity. They engulf bacteria, thus bringing the microbes more closely under the influence of their destroying angel, the special proteolytic enzyme or antitoxin,

likewise contained in the phagocytes. A localized infection of any kind causes not only an increase in the number of white cells in the blood, but also a concentration of these cells in the affected region. Not always do the leucocytes gain a bloodless victory. Numbers of them are frequently killed in the battle. A collection of such dead cells is termed pus, and this in itself, if there is no natural exit, constitutes a danger which only the knife can remove.

The number of bacteria taken up on the average by each leucocyte in the healthy person is the basis of the opsonic index of Wright—from the Greek word, *opson*, sauce or seasoning. Thus, if the average number of bacteria engulfed by the leucocytes of a sick person were 4 instead of the normal number 5, his index or ratio would be stated as 0.8. The opsonins of the blood modify bacteria by chemic or electric means and diminish the surface tension of the leucocytes, so that the germs are attracted to the cells, and not repelled; in other words, positive chemotaxis is substituted for negative chemotaxis. In the now justly popular vaccine treatment (revived by Wright) of infections, the opsonic index is kept above par and recovery hastened.

According to Sajous, the destruction of microorganisms and their toxins is further insured by an adequate febrile process due to interaction of the ferment trypsin (in plasma and leucocytes), fibrinogen and the active oxidizing principle of the suprarenal glands, which he has named adrenoxin. This defensive febrile action takes place normally in the peripheral capillaries and is favored artificially by the hyperemic methods, such as cupping, the use of rubber bands, etc., lately revived by Bier.

The three greatest successes in the practical application of the science of immunity have been the preventive control of smallpox and typhoid fever

by vaccination, and the prevention and cure of diphtheria with antitoxin. In the first instance, vaccinia, a mild or modified form of smallpox, is transmitted to a person by means of a preparation of scabs from calves who have been inoculated with cowpox. This mild disease leaves stored in the system for years antibodies or protective enzymes which quickly destroy the unknown germ of smallpox before it can gain a foothold in the body. Concerning typhoid, the record of the U. S. Army Maneuver Camp in Texas last year shows that, among 12,800 soldiers there was only one case of typhoid, and this was in a teamster who had not been vaccinated.

The proteid toxin of diphtheria is one of the very few bacterial poisons which are directly soluble apart from the bodies of the germs, and hence it is present in a filtrate of a culture of these microbes. It is extremely toxic, causing death in living beings 20,000,000 times the weight of toxin taken. When diphtheria toxin, prepared from virulent cultures, is injected into a susceptible animal in gradually increasing doses, this animal acquires a marked tolerance to the poison, so that an amount can finally be injected which at first would have proved quickly fatal. The serum of the treated animal's blood also acquires the property of protecting other animals against diphtheria, and can be standardized by physiologic tests against a given quantity of toxin simultaneously injected into guinea pigs. In practice horses are used as a source of diphtheria antitoxin, and are given tri-weekly increasing doses of toxin for from 6 to 12 months. The amount of antitoxin secured in this way may be 100,000 times that of the toxin injected. A normal antitoxic unit counteracts 100 doses of toxin fatal to the average guinea pig. Diphtheria toxin, being soluble, is liberated into the circulating blood from the localized area of

infection in the throat, and is taken up and antidoted directly by the antitoxin, which reaches the blood from the subcutaneous area where it has been injected. This antidotal reaction constitutes passive immunity of short duration, as distinguished from the enduring active immunity following the ordinary attacks of most infectious diseases.

A few infectious diseases, particularly malaria and syphilis, are due, not to vegetable microorganisms, i.e., bacteria, but to protozoans. The blood-destroying malarial plasmodium, transmitted from one human being to another, through the agency of the female *Anopheles* mosquito, is itself destroyed in the blood by full doses of quinin or arsenic. A drug which is fatal to a parasite and not lethal to its host, is termed parasitotropic, not organotropic.

This brings me, in conclusion, to the subject of the black scourge of syphilis and its treatment. In 1905 Schaudinn discovered the real cause of syphilis in a very pale and difficultly seen animal parasite, which he called the *Spirocheta pallida*, or *Treponema pallidum*, being one of about 50 species listed of this genus.

Syphilis has been treated for centuries with mercury, with success in the great majority of instances, but the treatment is prolonged and troublesome. When in 1910 Ehrlich announced that he had discovered a cure for syphilis by means of a single dose ("therapia sterilisans magna") of a chemical which he had discovered as the result of a series of 606 experiments, it seemed too good to be true—and it wasn't true. His remedy has the trade title Salvarsan. The full descriptive name is dioxidyamidoarsenobenzol. The drug is a light yellow powder, kept sealed in glass with nitrogen, to prevent oxidation. The usual dose for an adult male intravenously or intramuscularly is 0.6 gram (over 9 grains), of which 34% is arsenic. "606"—to use the

popular nomenclature—is parasitotropic and not organotropic—that is to say, it does not often kill the patient. But it is a heroic and dangerous remedy, nevertheless, preferably to be employed only in exceptional cases, as, for example, where mercury in any form is not tolerated. One dose of “606” probably never cures, but must

be repeated a number of times, without certainty of cure. That it is a wonderful symptomatic remedy, no one can gainsay, but I think about all syphilologists are agreed that if “606” is used at all it should be given in conjunction with that element which has stood the test of centuries, to-wit, mercury.

MEDICAL PROGRESS

Medical Treatment of Exophthalmic Goitre. Hartenberg (quoted in New York Medical Journal) advises a combination of drug treatment with electrotherapy. He applies the galvanic current (60-80 ma.) to the thyroid for 30 minutes every day or two, using here the positive electrode, which should be thick and broad. The negative electrode is placed on the back in the lower dorsal or lumbar region. The patient is also given at each meal a cachet containing 0.8 gm. potassium bromid and 0.3 gm. quinin sulphate. After two or three months of this treatment there is a marked reduction in the size of the neck and in the exophthalmos, a return of the heart rate to normal, not infrequently improved vision, and disappearance of psychic manifestations. As a prophylactic measure it is advisable to prescribe one or two seances of electric treatment and a resumption of the cachets for one week in every month.

Colonic Treatment of Acute Lobar Pneumonia. Anthony A. Rutz (New York Medical Journal, July 20) believes that the intestine is a special organ of excretion in pneumonia, since he has been able to demonstrate pneumococci in large numbers in the feces of pneumonia patients. He has therefore endeavored to aid natural elimination by keeping the bowels open and giving three times a day enemata of a quart of one percent hot salt solution containing one or two ounces of magnesium sulphate, to be retained about half an hour. He prevents excess of mucus in the bronchial tubes by having the patient expel the sputum with every attack of coughing. Other items of importance are: Absolute rest in bed; ice bag at the head if the fever is high; plenty of fresh air and water; carefully regulated diet; restricting solid food; digitalis as a heart tonic; small doses of veronal for restlessness. Dr. Rutz has treated 27 cases of acute lobar pneumonia in this way without a single death.

Acetone in Inoperable Uterine Cancer. George E. Shoemaker (Therapeutic Gazette, July 15) has observed great relief from the weekly application for a half hour of gauze saturated with acetone packed against the ulcerating point, using a tubular speculum

to protect the sound tissues, carefully removing excess of acetone after withdrawal of the gauze and finally inserting a vaselin tampon.

Relief of Obstinate Hiccough. After thorough cleansing of the prima via, mechanical pressure on the diaphragm would seem to be a reasonable procedure. With this end in view Kannglessen (quoted in the Prescriber) administered 5 grams of citric acid, and immediately afterwards an equal quantity of sodium bicarbonate. The hiccough ceased at once, and the patient had several hours' sleep before the annoying symptom returned. Joedicke has the patient draw up both legs so as to be fully flexed at the knees and hips, holding them pressed hard against the abdominal wall, so as to push the viscera as far as possible up against the diaphragm. He has seen this method give immediate relief in every instance of several cases.

The Intramuscular Administration of Neosalvarsan. In a recent editorial (“In Re Salvarsan”) in the Denver Medical Times, we stated that the good effects of salvarsan are more permanent when the remedy is injected into the muscles than when it is given intravenously. We are pleased to have this statement corroborated by Ehrlich himself, who is quoted to have said, a few weeks ago, to Abr. L. Wolbarst (Medical Record, July 27), that “salvarsan is essentially an intramuscular treatment, and the intravenous method must give way to the intramuscular, if some painless method can be devised.” Wolbarst himself has given about 300 intravenous and 100 intramuscular injections of the drug, and he believes that one intramuscular injection has the therapeutic value of at least three intravenous doses. He has been using neosalvarsan (“914”) lately and has found the following technique effective and almost painless: Mix the powder in a mortar containing 3 or 4 c. c. p. glycerin; add a few drops of 1% beta eucain or alypin solution in distilled water. Paint buttocks with iodine, and locate four spots, two in each buttock, into which 1 c. c. of the solution is injected and slight pressure made by the hand.

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CLINIC WEEK IN PUEBLO.

There was a medical and surgical clinic given by the Pueblo County Medical Society during the week beginning July 22, 1912. It was a decided success from every viewpoint.

So far as possible the doctors of Pueblo county, and many from the southern portion of the state, laid aside their routine work and attended the sessions of the clinic.

Every member of the society was assigned some work to present to his fellow practitioners.

The clinics were conducted at St. Mary's Hospital, Minnequa Hospital, Southern Colorado General Hospital, and Woodcroft Farm Hospital.

A great variety of work, medical, surgical and special, was presented, and much good accomplished, not only for the people who availed themselves of

the generosity of the clinicians, surgeons and hospitals, but also for the visiting doctors.

The greatest good was the unifying the profession and the stimulating of the feeling of interest in each other's work and ability among the members themselves.

The Pueblo County profession is "getting together" in a delightful way.

This feeling of good fellowship will react on the community and have a lasting effect for good.

A long pull, a strong pull and a pull altogether for the best work possible!

B. O. A.

THE "PROFESSIONAL DIRECTORY" GRAFT.

The physician is universally recognized as an "easy mark" by the horde of fakers and confidence men who de-

rive an income from their ability to take money away from suckers without giving anything for it in return.

The uncommercial nature of the physician's life makes it not surprising that he fails to recognize and avoid the new pitfalls which are spread in his path, but it is rather remarkable that a man of the mentality of the average physician should be regularly victimized by a perennial fake, such as the "professional directory."

So he regularly "bites" on the proposition; a directory combining only the names of high-class men, giving their hours and office location, and any specialty practiced; this highly respectable company of names is to be spread among those who know not Joseph, using as a medium the hotels, railroad offices, drug stores, and the Pullman cars.

If the victim ever sees one of the directories, he finds that he appears on a typographical equality with osteopaths, chiropractors, et id omne genus.

As a matter of fact, did you ever see one of these "directories" in a hotel, or a drug store, or among the literary treasures of a Pullman palace library and observation car?

The writer wotteth not of the great frequency of such.

As a matter of fact, the appearance of your name in these graft publications never brought you any business, and it never will, for nobody ever looks at them, unless it be some faker who is looking for a "sucker list," to the members of which he will mail his skin-game prospectuses.

The hotel clerks and bellboys refer guests to the "house physician," or to a medical friend, or to the doctor who treats them for nothing, or the doctor who "comes through" from the proceeds of a case.

The drug clerk knows who's who without looking in a "professional directory."

Now, why not, just by common consent, decline to patronize these things and keep in the pockets of the physi-

cians from \$500 to \$1,500 which has been going out every year in this way?

If you positively must get rid of this money, put it into the good roads fund, or give it to Dr. Jayne for the library.

STOVER.

NATURE AND HUMAN NATURE.

If we look upon nature, like Emerson, as all outside ourselves, it is certainly an immense field of study, including all other animate and inanimate objects and the forces which emanate from them and control them. While certain pseudo-scientists may deny, per os, the existence of matter and material forces, yet they find themselves under the painful necessity of "obeying the calls of nature." An express train may be a phantasm and a belief in the existence of Asiatic cholera "mortal error," but if these transcendentalists come into collision with the moving train, or if they imbibe a sufficient number of cholera spirilla, there is liable to be "something doing."

The ultimate nature of material nature is not known. We say that matter is made up of about 80 elements, namely, simple substances which cannot be broken down into other substances. Many substances once thought to be elements have been shown to be mixtures or compounds. A late example of this kind is the demonstration, by Sir William Ramsay, that radium consists to the extent of 75 per cent of the elementary gas niton ("radium emanation"). Chemists are constrained to believe that all the elements are made up of different proportions of hydrogen or other simple mother substances of low density. There is strong ground for assuming that the hypothetical atoms of matter consist of negatively charged units of electricity, termed electrons; the atom of hydrogen, for instance, containing 700 electrons. Thus the constitution of matter appears to be inseparable from force and energy.

The difficulty in conceiving all phe-

nomena as merely material in origin has been candidly expressed by Huxley as follows: "It seems to me pretty plain that there is a third thing in the universe, to-wit, consciousness, which in the hardness of my head or heart, I can not see to be matter or force or any conceivable modification of either." The physiologist, Howell, says: "The older physiologists, and some of recent times, have used the conception of vitalism as a convenient and easy means of accounting for many processes which further investigation has shown to be purely mechanical. Experiences of this kind tend to strengthen our belief that most of the unknowns confronting us at present will be analyzed eventually in terms of the conceptions of physics and chemistry; but there is always present in physiology the tendency to assume that what is not clearly or conceivably reducible to the laws of matter and energy must therefore belong to the irreducible residuum," a connotation of the term vitalism. Bernard came to the conclusion that the irreducible residuum, to which the laws of physics and chemistry are not applicable, is the power of development of the egg. Most physiologists of today recognize consciousness as the irreducible residuum, though Minot has courageously stated that "consciousness ought to be regarded as a biological phenomenon, which the biologist ought to investigate in order to increase the number of verifiable data concerning it," and Howell observes that "We are not able at present, it is true, to form any conception of the nature of the relation between the subjective and the objective, but new facts may alter wonderfully our insight into this mystery, and it is the clear duty of physiology to participate in the work of accumulating all possible data bearing upon this relation."

There are four things upon which terrestrial life depends: Air, water, sunlight and the mineral matter (nitrites, nitrates, phosphates, potash, iron, soda and lime) in the thin layer of land

earth termed the soil. In some regions, once fertile, the soil has been washed away or has been so depleted in phosphates and nitrates as no longer to be capable of supporting civilized communities. Indeed, the character of a civilization is largely determined by the climate and configuration of the country. The temperate zones of both continents comprise nearly all of our modern civilization. The gifts that come without cessation from the redundant horn of mother nature are vastly more essential to his welfare than are the political and economic schemes of man. A good general annual rainfall is more widely beneficent than a good president. Even now, while raucous patriots cavort about the country, proclaiming that they alone can be the savior of the nation, state, county, city, ward and precinct—we are pleased to state that our hens are still laying eggs, twelve to the dozen and every one with a shell.

The savage is essentially destructive by nature. He appreciates natural beauties but little, and the lower animals probably not at all. Civilized man projects his own vitality into the external world. He develops by cultivation the wild grain into wheat, and enhances the loveliness of the rose. With the expansion of transportation facilities, the most wonderful of nature's glories, formerly accessible only to hardy explorers, are now at the command of the average tourist.

The more romantic poets have at times expressed a wish to retire into the wilderness—though usually not entirely alone. Byron preferred to have along "one fair spirit for my minister," and Omar Khayyam:

"Thou

Beside me singing in the wilderness—
Oh, Wilderness were Paradise enow!"

As a matter of fact, however, Arctic adventurers and hermits and anchorites bear witness to the fact that a life of utter solitude, even in the most beautiful situation, tends to cause a rever-

sion to barbarous manners and habits. Man is at his best (and worst) and highest (and lowest) in those gregarious centers which we call cities. For steady use and good to man the fireside and the radiator are far and away ahead of the campfire. The golden sunset rays are never more radiant than when reflected from the windows of home.

The immutability of nature as a whole is perhaps its most marked characteristic. This relative changelessness has been well expressed by Macaulay as follows: "Since its first great masterpieces were produced, everything that is changeable in this world has been changed. Civilization has been gained, lost, gained again. Religions and languages, and forms of government, and usages in private life, and modes of thinking, all have undergone a succession of revolutions. Everything has passed away but the great features of Nature, and the heart of man, and the miracles of that art of which it is the office to reflect back the heart of man and the features of Nature."

Nature affects the mind through all the senses—most of all through the eye (the "window of the soul"), but the murmur and the fragrance of the trees ever green add much to the beauty of the landscape. The songs and chirpings of our feathered friends are among our most prized experiences. While the meadowlark has the sweetest note, the robin is most cheering. He seems to say, like Charles Reade's French soldier Denys, "Courage, mon camarade, le diable est mort." Nature reflects our own passing moods, at the same time soothing and broadening them. The intimate correlation of nature and human nature are beautifully indicated in Tennyson's "Bugle Song":

The splendor falls on castle walls
And snowy summits old in story;
The long light shakes across the lakes,
And the wild cataract leaps in glory.

Blow, bugle, blow, set the wild echoes flying.

Blow, bugle; answer, echoes, dying, dying,
dying.

O love, they die in yon rich sky;
They faint on hill or field or river;
Our echoes roll from soul to soul,
And grow for ever and for ever.

THE CHOICE OF A CARDIANT.

A great many practitioners pin their faith very largely to digitalis, strychnin and nitroglycerin, although they might get better results if they used a greater variety of drugs in cases of heart weakness and circulatory disorders, selecting each remedy according to special indications. Those we have found most serviceable are strophanthus, digitalis, apocynum cannabinum, spartein, caffen, convallaria, squill, cactus, calomel, saline laxatives, adrenalin, nitroglycerin, veratrin and strychnin or nux vomica.

For the weak, dilated heart so common in high altitudes, tincture of strophanthus has proved most generally available. It is a much safer and more agreeable remedy than digitalis, its one disadvantage (for some persons) being its distinct laxative action. Being quite bitter, it serves as a stomachic when taken just before meals, and may frequently be advantageously combined with tincture of nux vomica when a more general tonic effect is desired. In neurotic women it is often well to unite the strophanthus preparation with the fluid extract of *passiflora incarnata*, administering them two hours after meals. The average dose of the U. S. P. tincture of strophanthus is 8 minims (17 drops), and we know that it can be taken for months or years with no other bad effect than that of loose bowels. The active principle, strophanthin, and various ampoule preparations, are convenient for intramuscular and intravenous injections.

Digitalis remains our sheet anchor in the treatment of valvular heart disease (mitral stenosis and aortic regurgitation excepted) with failure of compen-

sation. The tincture (dose, 15 minims or 32 drops) is probably the most reliable official preparation. Many practitioners prefer the fat-free tincture or some one of the proprietary derivatives in liquid or solid form, as being more acceptable to the stomach and equally efficient. The belief that an infusion of digitalis is superior to the tincture as a diuretic appears to have no very solid basis. In the presence of marked dropsy the old Niemeyer pill (one grain each of digitalis, calomel and squill) is often very effective, but can hardly be given more than three days at a time, for fear of salivation. The saline hydragog cathartics, given in sufficient dosage in but little water before breakfast, are also indicated for most edematous conditions. Digitalis should never be given patients unless there is a distinct demand for it, and then it should be pushed to effect. Cushny, for example, recommends to give a teaspoonful of the tincture at a dose, repeating in twenty-four hours, remitting if nausea supervenes. While, generally speaking, we should consider the administration of digitalis less advisable than that of strophanthus in cases of hypertension, yet it may be occasionally needed in arteriosclerosis to keep up a high pressure which is compensatory in nature. In his work on arteriosclerosis, A. V. Meigs advises the use of 10 minims of the tincture with $2\frac{1}{2}$ grains ammonium carbonate three or four times a day for long periods. In order to prevent cumulative action, it is judicious to intermit the administration of digitalis for two days in a week.

A very valuable adjuvant in cases of venous congestion and dropsy of the lower limbs is the fluid extract of apocynum cannabinum (dose, 2 to 5 drops). The fluid extract of convallaria majalis (dose, about 15 drops) is occasionally helpful in irritable heart with frequent pulse. Adonidin is likewise recommended for the quick, low pressure action of irritable hearts.

Having tried it on frogs and dogs

with no effect, some non-practicing authors of works on therapeutics conclude that the fluid extract of cactus or its active principle, cactin, is therapeutically inactive with human beings. In this stand they find themselves opposed by many practitioners of wide experience. No less a physician than Sir Clifford Allbutt (Saunders' Handbook of Practical Treatment, 1911) has found cactus the best remedy for the irritable symptoms of functional heart disease, and very useful in convalescence from heart strain by effort. The dose of the fluid extract of cactus is about 15 drops:

An alkaloidal drug which has peculiar merit in the cardiac troubles of the elderly and aged is spartein sulphate ($\frac{1}{4}$ to $\frac{1}{2}$ grain three times a day). It slows and steadies the heart and is a reliable diuretic. Hunter McGuire (Wangh-Abbott Text-Book of Alkaloidal Therapeutics) reported that he lost more cases from post-operative suppression of urine than from all other causes combined, until he found the remedy in spartein, which he gave hypodermically in doses of one or two grains every three to six hours. The effects are manifest within 30 minutes, and last four to six hours. Patton has found spartein sulphate ($\frac{1}{2}$ to 2 grains) specially useful in myocardial weakness and ataxia of toxic origin, as well as in senile cardiopathies.

Another very valuable alkaloid is caffeine (dose, 1 to 5 grains) or caffeine citrate (double the dose of caffeine), particularly where blood pressure is low and some infection is present, as in asthenic pneumonia. The tablets of the soluble salts (caffeine sodiosalicylate and caffeine sodiobenzoate) are just the thing for intramuscular injections in urgent cases.

Strychnin is probably more used as a "heart tonic" than any other remedy—and with less reason, for it neither rests nor strengthens the heart, but is truly, as Hare has remarked, a cardiac irritant. Whatever good effect strychnin may have upon the heart is indirect.

through the spinal cord and the vasomotor system. It probably is of some value in the vascular stasis of pneumonia, influenza and other depressing infectious diseases, and is here best administered hypodermically. In the treatment of tobacco heart (regularly irregular), Walsh recommends tincture of *nux vomica*, 20 to 30 drops (according to weight), after an interval of five days increasing the dose one drop each day for five days until slight twitching—continuing drug for five or six weeks about five drops short of maximum.

Atropin sulphate or tincture of belladonna is at times a useful adjuvant in bradycardiac conditions, through its sedative or paralyzing effect upon the vagus nerve. This action is most beneficial in cases of neuritis of the pneumogastric, and is not in evidence in the treatment of slow pulse of intracardiac origin. Capsicum per os, camphor (dissolved in oil) and cocain hydrochlorate intramuscularly are noteworthy stimulants in adynamic conditions.

When the heart is laboring against excessive arterial contraction, as manifested by very high blood pressure, veratrin (dose, 6 to 24 half-milligram pellets daily) will be found most generally efficient in easing the pathway of the blood. In febrile cases aconitin or tincture of aconite may serve the purpose better. In the aged particularly the nitrites often act well. They also give relief in fatty heart. Nitroglycerin is most used, but patients frequently complain of the bursting headache which it excites. Sodium nitrite (dose, $\frac{1}{2}$ to 2 grains) is more permanent in its action and is readily administered, dissolved in water, preferably on an empty stomach. In the early stage of febrile affections, where oliguria and angiospasm are commonly present, the sweet spirits of niter is of well-known efficacy. For the apoplectiform and epileptiform attacks of the Stokes-Adams syndrome, with constant slow pulse, von Neusser

states that nitroglycerin or amyl nitrite is indicated and that atropin may do good. Amyl nitrite perles (3 m.) are useful in angiospastic emergencies, but very evanescent in effect. The employment of amyl nitrite in cases of shock or collapse (low blood pressure and feeble pulse) is obviously injudicious. Such cases demand a vasoconstrictor. The best remedies in this line are adrenalin and pituitrin intravenously, pituitrin having the more enduring effect. In the extremely low blood pressure of Addison's disease we have noted curative results from very large doses of solution of adrenalin chlorid (over 100 minims daily) or suprarenal extract tablets.

Much more important than medicines for most cardiopathic patients are rest, regimen and simple non-medicinal measures. The ice-bag (or cloth wrung from ice-cold water) next the skin over the heart, will usually quiet pain and palpitation better than any drug. The perfect inclined plane posture in bed is of great utility in advanced heart lesions, since it increases the diameters of the chest, making more room for the heart, and permits ready gravitation of the water of edema to the feet, whence it can be withdrawn by puncture. A good general rule in cardiorenal patients is to avoid fermentative foods and to limit the amount of food salt greatly. M. A. Mortensen (July Journal of the Michigan State Medical Society) has seen great benefit in a large number of cases of cardiac failure from using a hot fomentation over the liver and abdomen, with a cold compress over the heart, followed by cold friction to the skin of the entire body. This procedure, he says, tends to diminish the congestion of the liver, which always accompanies a failing circulation, dilates the capillaries of the skin and almost invariably gives some relief, at least in the first and second stages of of broken compensation.

NO!

I don't want to double my money in ninety days!
 I don't want to "get in on the ground floor"
 I don't want to go on the board of directors!
 I don't want to be a charter member!
 I don't want to sign any share in a patent!
 I don't want space in a professional directory!
 I don't want to sign any political petitions!
 I don't want any "drummer's samples" of furs!

I don't want a ticket to the mask ball, of the firemen, or the police men, or the mail carriers, or the elevator pilots, or the janitors, or the stage mechanics, or the Busy Bees, or the Helping Hand, or the waiters, or the hack-drivers, or the bar-tenders.

Doctor, if it weren't so disgracefully undignified, wouldn't it be fine to tack the above card on your waiting room door?

Just think of the time, cuss-words and money you'd be saved if the pests to which it refers, would read it and "take a tumble to it"!

S.

PERSONALS

By the Editor and Associate Editors.

Dr. and Mrs. Horace Burns are recreating in California.

Dr. George W. Perrin spent the first part of August in the East.

Dr. A. L. Beaghler has taken offices at 604 Metropolitan Building.

Dr. J. C. Workman of Ordway is visiting at his old home, Perrysburg, O.

Dr. E. W. Lazell has been suffering from the effects of a renal calculus.

Last year London had 19 murders, and Denver had 13. Aren't we great?

Dr. and Mrs. W. A. Sedwick spent the midweek of August at Buffalo Park.

Dr. Ernest M. Tayman of Cozad, Neb., has been calling on old friends in Denver.

Dr. and Mrs. C. W. Enos are spending a few weeks visiting friends in the East.

Dr. Perry Jaffa has returned to Trinidad, following a successful operation in Denver.

Dr. and Mrs. Cuthbert Powell have returned home from an outing in California.

Dr. George F. Roehrig has returned to Denver after four months' absence abroad.

Dr. Lewis A. Fisher and family have removed from Rocky Ford to Hutchinson, Kan.

Dr. Mary Ingersoll is a candidate for State Representative at the primary election.

Dr. C. M. Spicer is the primary Democratic candidate for coroner of Prowers County.

Dr. J. H. Kellogg of Lamar is the Republican candidate for coroner of Prowers County.

Dr. and Mrs. Walter M. Dake are having a pleasant outing at Crescent, on the Moffat line.

Dr. and Mrs. Robert B. Dibble, of Pueblo, are making an extended tour of western Colorado.

Dr. and Mrs. F. P. Gengenbach have moved into their new residence at 2200 Belaire street.

Dr. and Mrs. Tracy R. Love spent the first part of August at Columbine Ranch near Sedalia.

Dr. Robert L. Charles is home again, after two months' sojourn in New York and other eastern points.

Dr. and Mrs. Bon O. Adams spent the warmest days of August very pleasantly in Yellowstone Park.

Dr. George A. Moleen took a hunting and fishing trip in northern Colorado in the latter part of August.

Dr. P. D. Russell and family have returned to Pueblo from a two months' vacation on the Pacific coast.

Dr. H. G. Wetherill went fishing at Wagon Wheel Gap, the middle week of August, and he caught some fish.

The editor and his better half inspected the wonders of Yellowstone National Park in the first part of August.

Dr. Rudolph Arndt is spending a short time in Cleveland, visiting relatives and looking into physical diagnosis.

Dr. Emanuel Friedman is building a handsome residence at the corner of Irving Street and West Colfax Avenue.

Dr. J. J. Moore and family, of Concordia, Kansas, were recently the guests of Dr. J. D. Moore and family, of Pueblo.

Dr. Roy Finney and Miss Ruth Lucas, both of Pueblo, were united in matrimony, August 21st. Dr. Finney's sister, Miss Gertrude, was married on the same day to Dr. Jesse F. Williams of New York.

Dr. Ben B. Beshoar of Las Animas County is a Democratic candidate for the lieutenant governorship at the September primaries.

Fifteen surgeons attended the meeting of the C. R. I. and P. surgeons at Pueblo, Aug. 14-16, and had an enjoyable and profitable time.

Dr. A. A. Cunningham and family have returned home from a pleasant visit with friends and relatives in western Pennsylvania.

Dr. Haskell M. Cohen and Mrs. Jeannette L. Joseph were married, August 18, and are now spending their honeymoon in California.

We are pleased to note that our valued contributor, Dr. John M. Shaller, has fallen heir to a fortune from a cousin, recently deceased.

The city health office of Pueblo, under charge of Dr. Wolf, is giving free vaccination against typhoid at the city hall from 11 to 12 daily.

It is rumored that the Roosevelt party has nominated Theodore Roosevelt for president, and that Mr. Roosevelt has accepted the nomination.

Dr. G. W. Harrison and family have returned to Denver from six months' sojourn in Los Angeles, and have taken apartments at the De Soto Hotel.

Dr. Matt R. Root has returned to his practice in Denver, after ten weeks' absence, chiefly in the surgical clinics of England, France and Germany.

Dr. and Mrs. John F. McConnell have returned to Colorado Springs from their honeymoon on the Mediterranean, and are at home in their cottage at Broadmoor.

According to the Pueblo Chieftain, the employes of the Colorado Fuel and Iron Com-

pany are being vaccinated against typhoid free of charge at the Minnequa Hospital.

Mr. Israel Kleiner, a graduate of the scientific department of Yale and now working in the Rockefeller Research Institute, has been visiting his uncle, Dr. Moses Kleiner.

Dr. R. E. Doolittle has been appointed Chief of the U. S. Bureau of Chemistry, in place of Dr. Harvey W. Wiley, who resigned the position a few months ago. We trust that Dr. Doolittle will belie his name.

Our friend, Dr. Thos. Davis of Portland, Colo., was unanimously designated as the candidate for coroner on the county Republican ticket at Canon City recently. In electing Dr. Davis the people will make no mistake.

The Dietetic and Hygienic Gazette, which has held the leading place in its line for the past 28 years, has been sold to Frederic H. Robinson. The veteran therapist and litterateur, Dr. George F. Butler, is now editor of the journal.

Dr. S. T. McDermith announces that he has resigned the medical directorship of the Fraternal Union of America, and has opened an office at 507 Wyoming Building, for the resumption of practice, which will be limited chiefly to genitourinary diseases.

The genial Doctor J. H. Wolfe, representing Hoffman-La Roche Chemical Works, 65 Fulton Street, New York, was calling on the Colorado doctors recently. He reported a most satisfactory and increasing business. Dr. Wolfe is well liked by the profession in these parts.

The fourth annual meeting of the American Association of Clinical Research will be held in New York City, at the Academy of Medicine, Nov. 9, 1912. All communications should be addressed to the permanent secretary, Dr. James Krauss, 419 Boylston street, Boston.

Colorado is to have a large and representative delegation at the coming session of the National Irrigation Congress, to be held in Salt Lake City, September 30 to October 3. Up to 1910 over \$55,000,000 had been expended in this state in bringing nearly 3,000,000 acres of land under irrigation.

Dr. John A. McCaw is the Progressive Republican candidate for State Senator from the Twenty-second District. Dr. McCaw would make an excellent representative of the medical profession in the legis-

lative hall, and we hope that all of our readers who have the privilege will vote for him in September and November.

The sixtieth annual convention of the American Pharmaceutical Association, held in Denver during the fourth week of August, was fairly successful, there being 480 delegates in attendance. The weather man was at his best and the visitors were entertained liberally. Mr. W. B. Day of Chicago is the new president of the society.

The old saying, "Death loves a shining mark," was exemplified when Dr. Henry S. Denison passed away suddenly from heart failure, at his home in Denver, on the evening of August 24th. Dr. Denison was only 28 years old and showed great promise

of a brilliant and useful professional career. He was of a most happy and lovable disposition. A wife, a mother and a little daughter are left to mourn an irreparable loss.

The next meeting of the Colorado State Medical Society will be held in Pueblo, September 24-26, Dr. W. A. Jayne in the chair. Those of us who enjoyed the good times provided for us by Drs. Work and Corwin at the meeting in Pueblo ten years ago, and who are cognizant of the vigor and vim of the younger men (Adams, Baker, Epler, Pattee, Senger, Singer, et al.) expect the coming meeting to be up to the limit, and maybe a little beyond.

BOOKS

Neurasthenia Sexualis. A Treatise on Sexual Impotence in Men and in Women, for Physicians and Students of Medicine. By Bernard S. Talmey, M. D., former pathologist to the Mothers' and Babies' Hospital and Gynecologist to the Yorkville Hospital. With 19 drawings in the text. Price, \$2.00. The Practitioners' Publishing Co., 12 W. 123d Street, New York.

This is a well conceived and admirably written little book upon a subject of vital importance. The text is divided into seven parts, upon sexual anatomy and physiology, psychology of sex, and the etiology, pathology, treatment and hygiene of impotence in the human male and female. The last two parts especially will aid the family physician as a peacemaker in the homes and in getting good results with a class of patients who are commonly neglected and thereby relegated to the quacks. The author says that "those who claim that abstinence is injurious to health have absolutely no ground to stand upon. If the young man kept his thoughts pure and avoided exciting amusements which create emotional disturbances, impotence would be an unusual occurrence. If the young woman would avoid puttering over her genitalia, pelvic obsession with its accompanied hysterical conditions of hyperesthetic or paresthetic erethism would be rarely met with."

Gould and Pyle's Cyclopedic of Practical Medicine and Surgery, with Particular Reference to Diagnosis and Treatment. Second edition, revised and enlarged. Edited by R. J. E. Scott, M. A., B. C. L.,

M. D., New York. In two octavo volumes, with 653 illustrations. Price, \$14.00. P. Blakiston's Son & Co., Philadelphia, 1912.

The present editor of this beautiful and valuable work says in his preface: "In a word, the purpose of the present edition of this Cyclopedic is to provide the general medical reader with a source of information on every medical subject except his own specialty." We are convinced that this purpose has been well fulfilled, and that the busy general practitioner will find the Cyclopedic an ever ready help in time of doubt or trouble. The first features which strike the reader are the clearness of type, pithiness of style and the ease with which any desired information is found, the alphabetic arrangement being largely anatomic, and bold-face headings and top catch-words facilitating the search. The numerous anatomic and differential tables are remarkably full and instructive. The 93 eminent American authors of the work have given special attention to technic and treatment, and many well-tried formulas are distributed throughout the text. Every part of the work has been thoroughly revised for the present edition, more than 200 illustrations have been added, many articles have been largely rewritten and extended, and comprehensive new articles introduced upon the following subjects, increasing the size of the books by 400 pages—Anatomic Age; Appendicitis; Autointoxication; Bier's Hyperemic Treatment; Blood-pressure; Breast Tumors; Brill's Disease; Treatment of Cerebrospinal

Meningitis; Colon Bacillus Infection; Craniectomy; Cryoscopy; Cytology; Eclampsia; Feces; Food Adulteration; Fourth of July Accidents; Glandular Fever; Palmar Abscess; Heart-block; Hookworm Disease; Immunity; Inoscopy; Lambert's Treatment for Narcotic Addiction; Paralysis of Laryngeal Muscles; Modified Milk in Infant Feeding; Mosquitoes; Diseases of the Nasal Accessory Sinuses, Opsonin Therapy; Parasites; Paratyphoid Fever; Pellagra; Pyorrhea Alveolaris; Radium; Roentgen Rays; Sepsis; Serum Therapy; Sleeping Sickness; Extraction of Teeth; Tuberculin; Treatment of Tuberculosis; Retrodisplacements of Uterus; Vaccine Therapy, and Vaginal Douche. From the standpoint of practical utility, Gould and Pyle's *Cyclopedia* merits a prominent place in the working library of every family physician. The more one uses it, the more it is appreciated.

E. C. H.

Pellagra. History, Distribution, Diagnosis, Prognosis, Treatment, Etiology. By Stewart R. Roberts, S. M., M. D., Associate Professor of the Principles and Practice of Medicine, Atlanta College of Physicians and Surgeons. Octavo; 272 pages; with 89 special engravings and colored frontispiece. Price, \$2.50. St. Louis, C. V. Mosby Company, 1912.

It is estimated that there are about 10,000 pellagrins in the United States, chiefly in the southern states, and it is known that the malady is rapidly extending. The author says that the history of pellagra in other countries for the past two centuries warrants the belief that the United States is facing a long period during which the disease will prevail, and in which many thousand human beings will become its victims. While in Colorado previous to July, 1911, no cases were reported, in this and the following month nine cases were reported, and doubtless the disease has not always been recognized here. This monograph is not only a complete exposition of the subject, but it is also very well written. Take, for instance, a few sentences from the author's full description of the nervous symptoms of the pellagra: "He is no longer himself.

Memory begins to waver, and the recent past is more like an impotent dream. The lines and letters run after each other on the page, so that he can hardly use his mind to read. Formications, burnings, creepy feelings, coldness, numbness, run over the skin. The muscles of the legs seem rather lifeless, and the feet lift like lead. His vision is that of an old man, his face is thin, and his brow wrinkled a score of years before its time. He fears men and grows silent. His thoughts are gone, and he can no more supply his tongue with many words. Neurasthenia, sadness, hypochondria, edge on melancholy, and the mind begins to lift its tent and steal away." The characteristic facies and dermatoses of pellagra are well shown in the photographic reproductions.

E. C. H.

International Clinica. A Quarterly of illustrated Clinical Lectures and Especially Prepared Original Articles by Leading Members of the Medical Profession Throughout the World. Edited by Henry W. Cattell, A. M., M. D., Philadelphia. Price, \$2.00. Vol. II, Twenty-Second Series, 1912. Philadelphia and London, J. B. Lippincott Company.

The latest number of *International Clinica* is full of good things, and is handsomely illustrated with numerous figures and plates. Albert Abrams begins a noteworthy series of lectures on the principles and practice of spondylotherapy. J. Madison Taylor's contribution on "Psychic Hypertension: Restoration of Mind Control by Motor Training in Relaxation," shows the trend toward the practical utilization of psychotherapy by our foremost medical thinkers. "The Role of the Streptococcus," by W. H. Watters, is an admirable presentation of this important subject. A special symposium on anesthesia in all its forms is contributed by twelve writers. Surgeons will be interested in the paper entitled "Observations on Surgery of the Kidney," by Hubert A. Royster. Meyer Solomon concludes his essay on the science and practice of eugenics.

E. C. H.

UTAH SECTION

Denver Medical Times and Utah Medical Journal

Address all articles, personals, items of interest, and books for review, intended for the Utah Section, to the Editor, Frederic Clift, M.D., Ogden, Utah.

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Editor

DR. FREDERIC CLIFT, Ogden, Utah.

Associate Editors

Dr. Russell J. Smith....Bancroft, Ida. Dr. Eugene H. Smith.....Ogden
Dr. G. L. Servoss....Gardnerville, Nev. Dr. G. Henri Bogart.....Paris, Ill.

PROGRAM

Utah State Medical Association

The Eighteenth Annual Meeting will be held at
Ogden, September 24th and 25th, 1912.

DR. R. W. FISHER, Salt Lake City, President.

The program, although still incomplete and subject to change, indicates a breaking away from the old-time collection of dry and ultra-scientific papers. It should prove of interest to the profession at large.

Paper by Dr. Thos. W. Huntington, San Francisco, on "Surgical Treatment of Cancer of Lip."

Papers by Drs. R. C. Coffee and N. W. Jones of Portland on "Abdominal Ptosis."

The local members of the Association who will take part are as follows:

"Some Recent Developments on Infant Feeding," by Walter T. Hasler; "The Lacerated Perineum," by H. N. Mayo; "Carcinoma of Stomach," by E. F. Root; "Vasectomy," by A. S. Condon; "Treatment of Fractures," by J. C. Landenberger; "Pseudo Variola," by G. C. Emery; "Infant Feeding," by C. E. Carter; "Nostrums and Quackery," by P. Nelson; "Medical Sociology," by C. E. West; "Blood Pressure," by W. E. Whalen; "Uterine Dystocia," by Anna R. Finley; "Sinus Involvement in Nasal Conditions," by F. O. Reynolds; "A Plea for Sterilization of Criminals, Epileptics, Imbeciles and Insane," by C. M. Clark; "Golter," by J. W. Pidcock; "Anesthesia," by C. P. Harville; "Medical Supervision of School Children," by F. E. Clark; "Ulcer of the Stomach," by A. J. Hosmer; "Treatment of Prolapsus of Bladder," by Ezra C. Rich.

UTAH STATE MEDICAL ASSOCIATION.

The annual meeting of our State Association will be held in Ogden on the 24th and 25th, September—this month. At the time of writing we have not seen the program, but we have offered and are holding space for it. We urge those who are members to put aside their work for these two days and make an effort to be present. Those who are not members should be present as visitors, and place themselves in touch with the activities of their brother practitioners. Come, let us reason together, for by so doing we will find that "good reasons must, of force, give place to better." The new president of the A. M. A., Dr. Jacobi, in his inaugural, made many pertinent remarks, some of which are applicable to ourselves and our own State Association. In part he said: "In order to be powerful and influential, you must not only be wise, but numerous. Our colleagues in this vast country want to be invited. Then they will come in. They must learn what we are, and where their interests are. Let the people understand the meaning of the A. M. A., and its doctors through OUR doings and not through the scurrilous lies of our and the people's enemies. MULTIPLY AND BE FERTILE. STAND STILL AWHILE AND YOU INVITE DECLINE. It is by vast numbers only that our profession will ever attain its legitimate influence in politics and in Society, and such beneficent power as Socrates, Descartes, Kant and Gladstone claimed for it."

Dr. Murphy, the retiring president, referring to the large percentage of those outside of the A. M. A.—102,000 medical men to 34,000 members, said: "Are we doing a sufficient amount of work for the every-day practitioner to keep him interested? Are we giving him sufficient for the \$5.00 which he pays for his membership and the Journal or what in addition must we do to

keep alive his interest in the association and to obtain his support and membership? All these questions should be worked out by a body of men who have special ability and facilities to determine the cause and remedy the evil effects of this diminution in membership. The fact as it appears to me is that we have a colossal number of desirable members of the profession outside of the organization, who are not reaping the benefits in the way of education and stimulation to higher work which they should receive from this association."

These words, *mutatis mutandis*, apply to the Association of our own state. Out of something like five hundred qualified members of the profession in Utah, less than two hundred are members of our County Societies, and thereby members of the State Association. This means that numbers of our cities, towns and villages are wholly unrepresented in our State Medical meetings. The doctors as well as the people in these unrepresented places, have no means of knowing what we are doing. The press, subsidized as it is by the patent medicine men and those who run the so-called League of Medical Freedom, even in the cities where our annual meetings take place, display but little interest in the doctors and their doings. As a result, OUR doings are only heralded by "the scurrilous lies of our and the people's enemies." For example, the "Owen" or National Public Health bill. The doctor who is not in touch with the County Society, his State Association and the Journal of the A. M. A., is at a great disadvantage. He gets his knowledge of the subject, probably, from the subsidized press or trade journals, and being without proper facilities for mingling with and discussing the matter with his colleagues, he is often misled. He knows but little more of the reasons and details of the fight than his patients. He is unable to instruct them as to the facts, or to explain the inside

history or indicate the personages who make up and control this league of blatant obstructionists. He is handicapped through lack of association with his professional brethren, and both he and his patients are at the mercy of "OUR and the people's enemies." Scurrilous lies are told and some of the busy-bodies in their ignorance, telegraph to their senators in Washington that they are against the public health bill, or as a matter of fact, any other health measure for the benefit of "humans" that in any way touches their "craft," or the "setting of it at naught." To understand what is being done by these uneducated maligners in the name of FREEDOM, read the extract from the Congressional Record printed in the June issue of this Journal, pages 535-538. Senator Jones unblushingly read to his colleagues in the United States Senate the following, amongst other concoctions of lies and ignorance. Senator Jones hails from Oregon, and his correspondent telegraphing from Seattle, we wonder at whose expense, says: "The world is sound and moving on. Modern physiologic pathologists by sheer merit are rapidly supplanting allopathic pretensions. In desperation allopaths are seeking to recover prestige through gag legislation and state medicine, crushing with ignorant force an enlightened and aspiring people. For sake of truth and humanity, kill Owen bill. (Signed) Dr. P. Rudolph." (Note the use of the title. No such name is to be found in the list of physicians as published in the Standard Directory of Physicians.) Senator Owen, in referring to this and the other mendacious effusions, said: "Those artificial telegrams which are sent here—artificial in the sense that they are instigated by a private interest—serve no useful purpose except perhaps to confuse the minds of those who do not understand what it really means."

In the words of Dr. Jacobi, the pro-

fession, "in order to be powerful and influential, must not only be wise but numerous." Our colleagues want to be invited—then they will come in. They must learn what we are and where their interests are. What is the Utah State Association doing to make itself powerful, influential, wise and numerous? Is the Association making any special effort to bring those who are qualified of these three hundred who are now on the outside, into the fold? If so, how? Are these brethren being taught what we are, and where their interests are? The Association as a body is dormant from one October to the next. Whose duty then, is it to bring them in? The County Society's? Yes. But, who is seeing to it that the County does its duty? The Association should do so through the body specially designated for that purpose. The State Medical Council, consisting of the three District Councilors with the President and State Secretary as ex-officio members. This body of men surely meets Dr. Murphy's requirements—they have the "special ability and facilities to determine the cause and remedy the evil effects of this diminution in membership." Has the Secretary, President, Chairman or any member of the State Medical Council called the Council together during the past or preceding years to consider this and other matters affecting the interests and well being of the profession in this State? Echo answers, no. It is not suggested that the present Council is less interested than their predecessors, but they should be wiser than those who started out without any precedents to guide them, and with by-laws that in their working have proved inefficient for the practical carrying out of some parts of the outlined work. Collective experience in 1910 suggested that the Council should meet at least once in THREE MONTHS, but although so instructed by the House of Delegates, no apparent effort was made to do so, and in 1911 the Junior

Council or finding the requirement *otiosa sedulitas*, moved that it be rescinded. This was done, and during the current year no meetings have been held since the last day of the annual meeting—October, 1911—when practically little or no business was transacted. Everything has been left to the Secretary, and no attempt apparently has been made by the Council as a body to advance the material well-being of the profession.

This being the condition in the State, it is clear that the interests of the A. M. A. have also been neglected. Failure to secure the good will and membership of the profession in county and state necessarily reacts upon the National Association. The number of members of the A. M. A. in May, 1911, was 33,960, and in May, 1912, it was 34,283, an increase of only 323 for the entire U. S. A., leaving at least 72,000 physicians still outside the organization. Evidently Utah is not the only delinquent—but that is no excuse. Let Utah begin her house-cleaning by making her State Medical Council an effective and active body. Other State Associations are moving along lines of improvement. Ohio has recognized the difficulty and at the recent annual meeting amendments to the present by-laws were introduced with a view to definite action next year. We note that the proposed amendments follow along the lines of those suggested in our Journal in May last, page 484. Section 3 of Chapter 7 is very explicit. "Collectively the Council shall be the Board of Censors of the Association, and the EXECUTIVE BODY OF THE ASSOCIATION BETWEEN SESSIONS OF THE HOUSE OF DELEGATES, WITH FULL POWER TO ACT." New sections provide, "The Council shall have the right to communicate the views of the profession, and of the ASSOCIATION in regard to health, sanitation and other important matters to the

public, and to the lay press. Such communications shall be officially signed by the Chairman and Secretary of the Council as such." Also, for a General Secretaries' Committee, with the following duties: "The General Secretaries' Committee shall consist of three Secretaries and ex-officio the President-elect and the Secretary of the State Association. The Committee shall be appointed by the President. It shall be the duty of the Committee to devise ways and means of assisting and stimulating the work of the County Secretaries, to assist or suggest in the arrangement of programs for county meetings, to formulate and supply or suggest letters or other means of assisting the county secretaries in INCREASING THE MEMBERSHIP of their respective societies." Further, the Secretary and Treasurer are to be elected for a term of three years. This lengthening of the term secures experience and at the same time obviates the necessity for complimenting the occupant year after year until he begins to think that the Association would go to the "dogs" if the "boss" was not re-elected again and again, until he declared himself sick of the job. Ohio is the first state to act on our view of the important part that should be taken in matters medical by THE STATE MEDICAL COUNCIL in each state. That which Ohio is taking steps to do, let Utah improve upon.

THE STATE MEDICAL COUNCIL— ITS DUTY TO CREATE AND MAINTAIN INTEREST IN MEDICAL ORGANIZATION.

Dr. Horace A. Bonner, in his recent presidential address to the Ohio State Medical Association, said: "One thing is sure: interest in medical organization will never be created and kept up so long as the members attend meetings to hear only academic papers on 'The Treatment of Typhoid Fever,' 'The Surgical Treatment of Appendicitis,

'The Administration of Digitalis,' 'The Extraction of Cataract,' 'The Action of the Salicylates,' *et hoc genus omne*, read by those knowing as little or even less of the subject than they themselves do. And yet by many able men this is lauded as the real scientific work of a medical society; and discussions on organization, legislation, publicity work or any of the sociologic issues are derided as the introduction of politics into the profession. Gentlemen, we must learn that politics as applied to our work means simply the enlistment of any honorable and legitimate means to advance that most important office of our profession, viz.: the preservation of health. We must wake up to the fact that such questions as these are vital issues, and we must widen our ideas of scientific work so as to include them. When we do this and introduce the university extension idea, and every other good, broad idea into our programs, and make our meetings worth attending, they will be attended, and the Council's problem will be solved." Dr. Bonner here indicates what is indeed the fact, that the State Medical Council is responsible for the success of the Association meetings. It is true we have a committee on scientific work, but the council is the backbone of the organization, and in the proposed new Ohio by-laws the council is specifically required to prepare and issue the program. If our State Medical Councils have no ambition beyond "sitting still," and the members of the Council accept the office as one of *otium cum dignitate*, then our County and District societies lose touch with the profession at large, their membership will diminish and our annual meetings will deteriorate not only in quality of the output, but necessarily in the number of those in attendance. Does not this account for the failure of our recent meetings? Personally the writer admits the impeachment and regrets the lost opportunities. The only

excuse to be offered is that the Council was in embryo and its work was misunderstood because it had never been properly outlined by the A. M. A. or in the sketch outlines of constitution and by-laws submitted to the various states, but viewing the matter from the progressive standpoint of **today**, there is sufficient work in sight to call for a meeting of the Council at least once each month. Dr. Bonner continues: "The Ohio constitution as it now stands unamended—makes a very inefficient provision for doing business when the House of Delegates is not in session. The officers are given too little authority. The President, when the House is not in session, is little more than a figure-head. The Council is the only body authorized to meet in the interim and **so is the only body that can do business**. Emergencies have frequently arisen imperatively demanding action beyond any authority given." These remarks all apply to the Utah Constitution inasmuch as it was framed on similar lines. The Utah State Council should on behalf of themselves and their successors demand a revision of their constitution and by-laws, so that the obligations and duties of the Council as a body and of the Councilors individually may be fully and expressly defined. For, if it is the desire of the Association that its work should continue on during the entire year when the House of Delegates is not in session—full powers should be given to the Council to act in the name of the Association, and to do all that the delegates could do if in session. This would create a body that would have power and weight in all matters relating to the medical profession. Such a body would be consulted and listened to by our legislators, the executive head of the state and other officers of the commonwealth. **IT WOULD BE IN FACT AS WELL AS IN DEED—THE STATE MEDICAL COUNCIL OF UTAH.**

THE ORGAN OR OFFICIAL JOURNAL.

All organizations or societies require some means of communication between the officers and its members. In some cases a simple "dodger" fills the bill, but a body of scientific men should not be content with less than an up-to-date journal. If an association is financially unable—through a lack of a sufficient number of members, unable to run its own journal; and it may be here said that very few associations are able to do so successfully,—it, in conjunction with the affiliated District and County Societies, should be on friendly terms with some local scientific journal. This would provide for interchange of thought between its members in the discussion of vital and progressive issues as they affect medicine and its allied sciences. This would, of course, include the discussion of legislation affecting the public health and sociologic questions from the medical standpoint. In fact, that which the citizen in his civic capacity expects to find in his newspaper, the medical practitioner should look for in his scientific journal. Several of the State Associations have endeavored to provide their members with an Association owned organ, but for various reasons there is today a widespread feeling in favor of private enterprise in providing for the publication of the proceedings and papers read before scientific societies. For several years whilst this journal was under the editorial charge of Dr. W. Brown Ewing, the present secretary of the State Association, he was given the proceedings and papers of the Association for publication in this journal, but after his retirement from the editorial chair—withstanding the fact that every facility was continued to the members of the Association to utilize the journal for the dissemination of news and items of interest to the members of the various medical societies of Utah—Dr. Ewing as a member of the Association Com-

mittee of Publication opposed the giving of the papers, etc., to the present editor, and finally obtained the withdrawal of the Association support from this journal. North-West Medicine, the journal selected by Dr. Ewing, has utterly ignored in its news and editorial columns not only the Utah Association, but all reference to legislative, medical and scientific questions affecting the profession of this state.

The policy of the Utah Medical Journal, both before and since the withdrawal of Association support, has been to direct the thought of the Utah profession along lines of medical and scientific interest, and in so doing it notably helped to mold legislation in the spring of 1911. It has consistently endeavored to elevate the medical practitioner and safeguard his interests in the eyes of legislators and the public officials of the state. Many of the members of the Association are subscribers to the Utah Medical Journal, but naturally the majority being in receipt of a free copy of North-West Medicine, the present editor of this journal has lost a valuable field for the discussion of subjects pertaining to the Utah profession and the well-being of Utah from the medical point of view. However, there has been some compensation inasmuch as it has liberated a number of pages in each number of our journal for fuller discussion of matters of special interest to Utahns, both members and non-members of our State Association. Also the fact must not be overlooked that many physicians cast aside a journal in any way affiliated with a medical society.

In order, however, to still further widen our field of usefulness and to reach those members of the Association who are not direct subscribers, the editor's offer to publish the proceedings and papers of the forthcoming annual meeting will be renewed, notwithstanding his predecessor's personal animus in the matter.

THE PLANKS.

The Republicans and Democrats have held their conventions and published the principles under which they will wage war for supremacy in November. While the doctor is interested largely in the entire platforms of both parties, he is naturally anxious to know what he may anticipate being done for him. He wants to know if he is to be protected from charlatans and quackery, or if he is to be a portion of the submerged tenth, insofar as the government may be concerned. He is interested in anything which will increase the entire prosperity of the people of the Nation, but he is just a little selfish in knowing whether or not either party intends giving him any succor in his attempt to conserve the general health of the people. He desires to know if either party, as a whole, through its representatives in convention, show any disposition to assist him, either in their efforts to maintain the people of the Nation in good health, or to see that he be furnished with proper agents with which to wage war against disease. He wants to know which party is broad enough to step out of party lines and take up a non-partisan fight against those things which may be bad for the health of the people, regardless of a representation of money, be it large or small. He wants to know which party, if any, believes in decency in medicine, either preventive or curative. He wants to know if either party believes in conservation of human health as thoroughly as in that of domestic animals. He wants to know which party will foster epidemics, the results of which make the Titanic disaster resemble a pigmy, insofar as loss of life may be concerned.

What have the leading parties done, as regards the conservation of the health of the Nation, as outlined in their platforms? After carefully reading that of the Republicans one is unable, even with the highest power mi-

croscope, to discover a single word relative to anything regarding health. The facts of the matter are that, at the Chicago convention, this matter seems to have been forgotten. Why was this? Was it an oversight upon the part of the framers of the principles of the party, or was any mention omitted intentionally? In view of the fact that some of the Republican senators have openly said that they would, under no circumstance, support the Owens bill, now pending in the Senate, after a repose of several years in committee, it would appear that this omission might be taken as intentional. Of whom are the Republican leaders fearful? Was any mention of the national health service omitted because of the fact that the establishment of such service might react upon the moneyed interests, as represented in the patent medicine industry? Were they fearful that a portion of the campaign fund might not be forthcoming if they combatted such interests, even indirectly? If such is the case, do the leaders of this great party believe in the protection of the few to the detriment of the many, as has been established as an absolute fact, in instance after instance where nostrums have been used in self-medication?

What has occurred during the present administration? It may have some bearing upon the omission of any plank relative to the health of the Nation. Early after March 4, 1909, we see that Doctor Wiley, the chief chemist of the United States, being seriously interfered with in many of his tests, made with the idea of the conservation of human health. Such interference was carried to such an extent as to cause the final resignation of the doctor, were he to preserve his personal dignity. The administration upheld all such interference, either by word or act, and instead of the discharge of the ones in charge of the Department under which Dr. Wiley worked, and the counsel of that department, thus showing that the

public health was considered a matter of value, those who upheld nostrums and quackery were retained. During this same administration the courts have handed down final decisions whereby portions of the Pure Food and Drug Act have been made inactive and whereby the manufacturers of patent medicines have been given as much latitude, practically, as was theirs at any time before the passage of such act. An attempt was made to pass a law prohibiting decent pharmaceutical manufacturers the privileges of the mails in the transportation of certain habit forming drugs, even though such shipments might be made to physicians, and to be employed legitimately by the latter. As nothing came of this measure, the bill was probably killed in committee. This bill was introduced by the drug interests in order that they might force the doctor to practice entirely as a prescription writer, as nothing was said of any restriction being placed upon memory serves properly, the doctor was to have been obliged to obtain all habit forming drugs through the retail druggists, as even the jobbers were prohibited making shipments to the doctor.

The facts of the matter seem to be that absolutely nothing has been done in the interests of the doctor by the present administration. He has even been accused of dishonesty of purpose in his furthering of the Owens Bill by some Republican members of the Upper House of Congress. His National Association has been termed a "trust" for the simple reason that it has endeavored to bring order out of chaos and to assist in the placing of matters pertaining to the general health of the Nation within the bounds of one service, thus favoring not only economy of operation, but rapidly thereof as well. This association has been accused of selfishness time and again because of the fact that it has endeavored to inculcate decency of action into matters pertaining to National health, no matter

whether such movements have been for the furtherance of preventive medicine or in the insistence that the remedies furnished doctors in the treatment of the sick be of the highest possible quality. What has the present administration done to further the interests of such men as are found in all of the various schools of medicine, all of whom insist upon a betterment of general conditions, as related to human health? We do not say that the executive head of the Government has furthered any actions derogatory to the medical profession directly, but by insistent quiet, in so far as messages to Congress might have been concerned, nothing has been done, and if the Chicago platform is followed to the letter, in the event of a Republican victory in November of the present year, it is very possible, in fact probable, that any measures introduced, similar to those which have already appeared before Congress, will meet a like fate during the coming four years. The Republican party is not pledged to do a single thing to conserve the health of the people of this Nation, either through preventive or curative medicine. It is too bad that a party which has stood for progression of all kinds, year in and year out, for more than fifty years, should overlook a matter of such grave importance to the entire people, regardless of the fact that decency of administration might act to remove from the marts a favored few.

Just what the new Progressive party will do is not known. Roosevelt, who heads this movement, is known as a conservator of everything good. It was under him that the Pure Food and Drug Bill became a law, and while in office it was his effort, seemingly, to further the interests of those who executed this law. Dr. Wiley was upheld in his work, no matter if certain interests might have suffered. The Pure Food and Drug Act was effective. As our publisher asks for "copy" early, we are writing this prior to the meeting of the conven-

tion of the new party. As this party stands for everything progressive, we presume that it will, in its platform, introduce some sort of a plank upon the subject of the National Health Service. If such is the case, the newer party will be worthy of the consideration of the medical profession.

In their Baltimore convention the Democrats did not overlook a mention of the Public Health Service, and included in their platform a plank which reads as follows:

"We reaffirm our previous declarations advocating the union and strengthening of the various governmental agencies relating to pure foods, quarantine, vital statistics and human health. Thus united and administered without partiality to or discrimination against any school of medicine or system of healing, they would constitute a single health service, not subordinated to any commercial or financial interests, but devoted exclusively to the conservation of human life and efficiency. Moreover, this health service should co-operate without interference with their prerogatives or with the freedom of individuals to employ such medical or hygienic aid as they may see fit."

Nothing could be fairer or squarer than a plank reading as does the above. It covers the ground which has been so often gone over by the doctors, both in and out of the American Medical Association, and in a concise way, without dodging the issue at a single point. This plank is worthy of more than passing note by every member of the medical profession. It means, if the Democrats are successful in November, and if they pursue the policies of their platform to the letter, that we may be assured of better things in connection with medicine.

The writer has always been a Republican, in fact has been called a "stand patter" at times, but he does not believe that any man should stand in his own light. He does not believe in many of the precepts of the Democratic party,

but if that party can, and will, assist the medical profession to the bringing about of reforms which will improve the efficiency of the Nation, every doctor should vote that ticket, and exert every effort in seeing that his patrons do likewise. Not only should the administration of this Government exert itself to conserve the health of the Nation, but in addition it should be equally effective in insisting that the sick be furnished with the highest possible class of drugs. Any government which overlooks and regulates any possible thing which will make for the death of more than 100,000 babies in arms every succeeding year, will have done more than will a government which protects the interests of the few to the detriment of the many. What we need in the White House and in the Halls of Congress are men who possess stamina and who will not interfere with the interests of the many in the benefit of the few, regardless of the fact that a matter of dollars and cents may enter within the question. The conservation of the health of the people of the Nation is of much greater importance in the aggregate, than is the making of a few dollars by a few men. The loss of life of babes alone, within the boundaries of the United States in a single year, figuring each life as having a value of \$1,000, means a loss of more than \$10,000,000 annually to the country. Added to this the thousands of deaths, preventable if proper precautions were taken, and the amount swells to one which is appalling. If we possessed laws, either National or State, which would compel proper conservation of health, the loss of a few would be more than overcome by the gains of the many. This is a matter of as much, in fact more, importance than is the tariff, or in fact any other question now before the American people and we should see that an administration is elected which will take proper steps to bring about needed reforms in this direction.

SERVOSS.

P. S. Since the foregoing was written, the Progressive Party has held its convention in Chicago, and in its platform has declared for a single National Health Service, in that the health of the nation may be conserved. As platforms are but promises, and these very frequently overlooked, subsequently to election, they must be taken with a grain of salt, but as the present administration and many Republican members of the Senate have done nothing, in fact blocked progress toward the passage of a National Health Service Bill, it is not very probable that, in event of Republican victory, much, if anything, will be done in this direction during the coming four years. The Democrats, Socialists and Progressives have all declared in favor of the establishment of a National Health Service, under one head, and it behooves the doctor to support the party which promises him the best returns in the future. It looks like a Democratic victory this year, providing Roosevelt cannot swing the country promised him and as the major portion of the Democrats, both in the House and Senate favor measures which will improve public human health, it is very probable that the doctor will be uplifted by this party.

S.

REPORTING VENEREALS.

The "Utah Plan" is still to the front in Sociologic discussions. We believe our readers will be interested in the following editorial in the June issue of the Charlotte Medical Journal. We especially commend the last paragraph to the attention of our readers.

Utah has passed a law requiring her physicians to report venereal diseases. I have not seen the text, but presume that it applies to syphilis, gonorrhea and chancroid. It is an experiment whose outcome will be watched anxiously the world over. As to its desirability, no sanitarian, or scientist, or sociologist, or man of average education and intelligence, looking at things as they are with modern eyes and not through the smoke of medieval superstition, has the least doubt. By its thoroughly effective enforcement an end would be put to two of the greatest curses inflicted upon humanity.

These three venereal diseases have no right to exist, because they can easily be recognized, guarded against and

cured. Ignorance alone, and carelessness, permit them to continue. If every syphilitic and gonorrheic were registered and compelled to forego such intercourse with others as might impart the disease to them, there would be little disposition on the part of the infected to neglect the treatment that would eradicate the disease.

The harm that they do is beyond computation. Syphilis is causative of many maladies; it is liable to show itself after many years' apparent freedom, in ataxia, convulsions, or other implications of the nervous tissues, the arteries, or other parts. It is transmitted to the innocent wife and the unborn child. The latter may be apparently free from the infection, and when it reaches adult life have its sight destroyed by interstitial keratitis.

Terrible as are the ravages of syphilis, those of gonorrhea are worse. Joe Price, whose untimely death we all deplore, once said that more than ninety per cent of the operations he performed upon women for pelvic disease were the result of gonorrhea. Our asylums for the blind depend on gonorrhea for their chief supply of patients.

The frightful thing about it is that practically all these victims are innocent. We are leaving out of account those who contract the infection by unlawful sexual intercourse, and consider only those to whom the infection comes in other ways.

The man who has contracted genital venereal disease is punished thereby for his wrong. He is sometimes careless or indifferent about transmitting the disease to others, even doing this purposefully sometimes as what appeals to him as a joke, or from the same motive that led the fox who lost his tail to recommend to his mates a similar mutilation. But very much more frequently he is himself ignorant of the injury he is doing, believing himself cured. We forget that it is only a few years since Neisser enabled us to recognize the gonococcus,

and opened our eyes to the diagnosis of the maladies it occasions. Still more recently, Wassermann has enabled us to be sure about many syphilitic cases at which we only guessed before, and about a good many more we did not even so much as guess, or even suspect.

We do more than diagnose. With salvarsan and other forms of organic arsenic we probably possess the means of extirpating syphilis, in a time so brief as to seem unbelievable to him who was taught by Fournier to require four years for its eradication—and the pessimist denied that it could be done in that time, or ever. Without salvarsan we have learned to cut the time to less than a year, by a better and more scientific use of the old remedies, mercury and iodine, reinforced by pilocarpine and other adjuvants. The complete cure of this infection in a reasonable time will render it much easier to manage these patients, and to keep them in line.

As to gonorrhea, many will deny the possibility of eradicating it, as they have denied the curability of syphilis. I am one of those who believe that gonorrhea in all its manifestations is as surely controlled by the sulphides as is syphilis by mercury. Although the gonococcus is a plant and not, like the germs of syphilis, trypanosomiasis and malaria, a protozoan, arsenic sulphide greatly enhances the curative influence of calcium sulphide. Saturation with these, maintained for two weeks, is an ordeal no coccus can withstand.

Despite the advantage afforded by modern treatment, of a rapid and radical cure, it is to be feared that there will be insuperable difficulties in the way of the enforcement of this Utah law. The shame of the thing will deter many from applying to any physician except one who is known to be "amenable to reason"—these things go about almost by telepathy—and can be induced by suitable persuasion to disregard the law.

These may even be instances where the physician may feel himself justified in pleading the ancient privilege of guarding his patient's secrets from publicity. Whether it is, on the whole, better that a guilty husband should be protected and shielded, that he may continue to deceive his wife, we leave to the casuist—men can argue interminably on such topics and make no progress.

But if the doctor honestly obeys the law and the druggist doesn't, the rest of the venereal practice will fall to the druggist. Since he now gets most of the gonorrhea cases, and his ineffective treatment is the cause of most of the calamities resulting, the harm that will follow may be realized.

However, these western commonwealths have a way of meeting difficulties with swift and effective remedies, and if this should be the result of the present law, we may expect to see it followed by another, prohibiting the treatment of venereal diseases by druggists, under penalties. We will then find the man who contracts gonorrhea reported, and this, with the apprehension of publicity, will prove a powerful deterrent against illicit indulgence. That it will put a stop to this is idle to expect, unless one believes that by legislative enactment a new chapter may be written into the history of the human race.

The eyes of the world are on Utah. She has done a brave thing. She has dared assault vice in its stronghold. What will be the result? Has her executive the courage and the ability to enforce the law, to meet the difficulties it will surely entail, and so manage them as to administer the law successfully? If so, the older States will learn the lesson from their young sister.

W.

A CERTIFICATE OF HEALTH BEFORE MARRIAGE.

This is no new fad. The sentiment in its favor has been growing for many

years. Like many of the other progressive laws founded on what was at one time looked upon as extreme radicalism and nothing more than the day dreams of visionaries—the movement favoring a certificate showing that an applicant for a marriage license is free from syphilis or gonorrhea secured legal recognition in the Middle and Western States. The early pioneers of the West knew the physical advantages following a sound mind in a sound body. They sought health in mind and body for themselves and believed that in a new country they could raise children who would be free from the preventable social diseases of the Eastern States and Europe. They did so to a demonstrable extent, but the coming of the railroads with facilities for intercommunication brought in the old evils. Finding that their hamlets and towns, which but a few years before were free from venereal diseases, began to furnish their quota—the hardy forefathers and their descendants sweeping aside the doctrine of privileged communications and other falacies suited to a bygone age, sought to strike at the root of the evil by the enactment of laws which up to a recent period were unheard of and thought to be impossible and unworkable.

The State of Michigan led out in the crusade for the protection of the health and marital happiness of her fair daughters by making the marriage void and the uncured syphilitic or gonorrheic guilty of felony.

The law having been enacted in 1897 has passed the experimental stage. Like other laws designed for the good of the majority, continual efforts have been made by the few to evade it,—but Michigan recognized its benefits and today she finds that neighboring States are falling into line with the result that her own initiative law is becoming more and more effective in her own State, inasmuch as it is being added to and improved upon by adjoining States. Other

of our Western States are in the van with so-called Sociologic laws. Indiana sterilizes her criminals and degenerates. Utah has pioneered the way in requiring the notification of venereal diseases. The Indiana and Utah “Plans” are being adopted by even Eastern States.

The Michigan law reads as follows:

No. 8593. Sec. 6. “No insane person, idiot, or person who has been afflicted with syphilis or gonorrhea and has not been cured of the same, shall be capable of contracting marriage. Any person who has been afflicted of syphilis or gonorrhea and has not been cured of the same, who shall marry shall be deemed guilty of a felony, and upon conviction thereof in any court of competent jurisdiction, shall be punished by a fine of not less than five hundred dollars nor more than one thousand dollars, or by imprisonment in the State Prison at Jackson not more than five years, or by both such fine and imprisonment in the discretion of the court. Provided, that in all prosecutions under this act a husband shall be examined as a witness against his wife, and a wife shall be examined as a witness against her husband whether such husband or wife consent or not. And provided further, that in all cases arising under this act any physician who has attended or prescribed for any husband or wife for either of the diseases above mentioned shall be compelled to testify to any facts found by him from such attendance. * * *

It will be observed that Michigan declares the marriage of an uncured syphilitic or gonorrheic to be void, *ab initio*, and does not call for any certificate of health. The result of some fifteen years working of the act has been to impel other Legislatures to require a certificate of health prior to the marriage. The certificate calls a halt before the mischief is done, and without doubt is the preferable course.

OGDEN EXTENDS THE GLAD HAND

The annual meeting of the Utah State Medical Association will be held in Ogden on September 24th and 25th—this month.

Ogden shares with Salt Lake City the honor and pleasure of being the host of the Association on the occasion of its annual meetings, and it is not exaggeration to say that the unanimous verdict is that, "We always have a good time in Ogden." Neither is it promising too much to say that this year Ogden intends to live up to her reputation as a host, with a little bit added for good measure. The unfortunate automobile accident, resulting in the serious injury of several prominent members of the association, and its guests, which marred the pleasure of the last Ogden meeting, will serve now only to stimulate the Ogden members to make extra efforts to make the coming meeting the most successful in the history of the association. It is hoped that besides the "old guard," which can always be counted upon to be present, (to whom all honor is due for faithful and unflinching service,) that the newer and younger members of the profession in the State will take advantage of this opportunity to become acquainted with the association, its members and its work. It is certain that any such will return home, proud to be a member of such a body of men as the organized profession in Utah.

Some argue that they can sit down at home, and while enjoying the comforts of their own firesides, acquire more information from books and journals, than they can from papers read at medical society meetings. Granted. But it has done the other fellow a great deal of good to write his paper and if his statements and conclusions show that he is lagging behind the wave of progress, there will come a time in the proceedings when the meeting will be given over to discussion, and then, out of the vasty deep of your mind you can

put the poor fellow right, which will do both of you good. The value of the meeting lies not solely in listening to papers and discussions. There is the human side—the stimulating influence of mingling with men whom you suspect of doing a bit better work than you are doing: (and their meeting with you will probably give them a similar impression of your superior abilities), with resultant benefit to all.

But above and beyond these selfish considerations, every reputable physician in Utah should attend these meetings, (and it is as possible as it is to go on that fishing trip), because the association needs him. The organized profession in the United States, of which this association is a unit, is doing a wonderful work:—the benefits fall without discrimination upon the just and upon the unjust—but the man who receives them without lending his hand to help carry on the work, or giving a word of encouragement to those who do, is comparable to the able-bodied man who is willing to let his wife work to support him.

There will be a great meeting in Ogden, and **you** will regret not having gone when it is all over, and you find that during the two days of the session you were sitting around the office with nothing to do, and your last excuse, that you "were too busy," has gone glimmering. The really busy men are always there.

E. H. S.

THE PHYSICIAN IN POLITICS.

The Republican Club of Layton, Utah, having had their attention called to the "hoodoo" health plank in the Chicago platform endorsing Mr. Taft, voted to table the resolution in their constitution embodying that platform and appointed a physician as a committee of one to prepare and submit a resolution advocating further efforts to protect and safe-guard the health of the people of Utah by the creation of a national department of public health. The following is the resolution as submitted at a meeting on the 20th of August:

"Believing that a vigorous, healthy population is our greatest national asset, and that the growth, power and prosperity of the country depends primarily upon the PHYSICAL WELFARE of its people and upon their PROTECTION FROM PREVENTABLE PESTILENCES of both foreign and domestic origin and from ALL OTHER PREVENTABLE CAUSES OF DISEASE AND DEATH, including the sanitary supervision of factories, mines, tenements, child-labor, and other places and conditions of public employment or occupation involving health and life, WE, THE REPUBLICAN CLUB OF LAYTON, DAVIS COUNTY, UTAH, ADVOCATE the organization of all existing national public agencies into a NATIONAL DEPARTMENT OF PUBLIC HEALTH—under the supervision of a duly qualified scientific Director or Chief to be appointed by the President with the consent of Congress—with such powers and duties as will give the FEDERAL GOVERNMENT

control over public health interests not conserved by or belonging to the several states. AND WE RESPECTFULLY ASK the Delegates to our forthcoming County and State Conventions to embody a RESOLUTION to this effect in our State Platform with a proviso that this National Department of Health when created shall have no power to regulate the practice of Medicine or the practice of Healing or to interfere with the right of a citizen to employ the practitioner of his choice, and that all appointments within the Department shall be made without discrimination against or in favor of any school of medicine or of healing."

The 100,000 physicians of the United States will come into their own, if THEY individually and their patients insist upon scientific principles and methods being put into practice by those in authority in State and Nation. Human beings require as much legislation and looking after as the HOG and the CATTLE on a thousand hills.

THE NEW CODE OF ETHICS.

The Revised Principles of Medical Ethics, adopted by the American Medical Association at Atlantic City, is a step forward and a great improvement on those adopted in 1903. Inasmuch as the Golden Rule should be the same for yesterday, to-day and tomorrow, we find that in fact there is no breaking away in this revision from the general rules of conduct as laid down in 1903 for the guidance of the medical profession. The new Code is an enlargement along general lines and is couched in more specific language. It avoids generalities and therefore gives less opportunities for misconstruction.

The new Code should be adopted by our State and County Societies and an earnest effort made to have it accepted by the representatives of the other recognized schools of medicine and healing in this state. We believe that all practitioners holding state licenses can accept and work together upon the basis of this Code. The State Board of Medical Examiners is composed of representatives from all the schools, and if they can dwell together in peace and harmony, as in fact they do, there is no reason why the entire membership of the profession cannot work together and be governed by the Golden Rule as set forth in the new Code. Annoying problems will continue to beset each of us in our work, but as the standards of medical education continue to improve, individual frailties and misunderstandings will diminish, and each will learn to under-

stand and appreciate the other brother's work.

PRINCIPLES OF MEDICAL ETHICS. Revised 1912.

Chapter I.—The Duties of Physicians to Their Patients.

The Physician's Responsibility.

Section 1.—A profession has for its prime object the service it can render to humanity; reward or financial gain should be a subordinate consideration. The practice of medicine is a profession. In choosing this profession an individual assumes an obligation to conduct himself in accord with its ideals.

Sec. 2.—Patience and delicacy should characterize all the acts of a physician. The confidences concerning individual or domestic life entrusted by a patient to a physician, and the defects of disposition or flaws of character observed in patients during medical attendance should be held as a trust and should never be revealed except when imperatively required by the laws of the state. There are occasions, however, when a physician must determine whether or not his duty to society requires him to take definite action to protect a healthy individual from becoming infected, because the physician has knowledge, obtained through the physician, of a communicable disease to which the healthy individual is about to be exposed. In such a case, the

physician should act as he would desire another to act toward one of his own family under like circumstances. Before he determines his course, the physician should know the civil law of his commonwealth concerning privileged communications.

Sec. 3.—A physician should give timely notice of dangerous manifestations of the disease to the friends of the patient. He should neither exaggerate nor minimize the gravity of the patient's condition. He should assure himself that the patient or his friends have such knowledge of the patient's condition as will serve the best interests of the patient and the family.

Sec. 4.—A physician is free to choose whom he will serve. He should, however, always respond to any request for his assistance in an emergency or whenever temperate public opinion expects the service. Once having undertaken a case, a physician should not abandon or neglect the patient because the disease is deemed incurable; nor should he withdraw from the case for any reason until a sufficient notice of a desire to be released has been given the patient or his friends to make it possible for them to secure another medical attendant.

Chapter II.—The Duties of Physicians to Each Other and to the Profession at Large.

Article I.—Duties to the Profession.

Section 1.—The obligation assumed on entering the profession requires the physician to comport himself as a gentleman and demands that he use every honorable means to uphold the dignity and honor of his vocation, to exalt its standards and to extend its sphere of usefulness. A physician should not base his practice on an exclusive dogma of sectarian system, for "sects are implacable despots; to accept their thralldom is to take away all liberty from one's actions and thought." (Nicon, father of Galen.)

Sec. 2.—In order that the dignity and honor of the medical profession may be upheld, its standards exalted, its sphere of usefulness extended, and the advancement of medical science promoted, a physician should associate himself with medical societies and contribute his time, energy and means in order that these societies may represent the ideals of the profession.

Sec. 3.—A physician should be "an upright man, instructed in the art of healing." Consequently, he must keep himself pure in character and conform to a high standard of morals, and must be diligent and conscientious in his studies. "He should also be modest, sober, patient, prompt to do his whole duty without anxiety; pious without going so far as superstition, conducting himself with propriety in his profession and in all the actions of his life." (Hippocrates.)

Sec. 4.—Solicitation of patients by circulars or advertisements, or by personal com-

munications or interviews, not warranted by personal relations, is unprofessional. It is equally unprofessional to procure patients by indirection through solicitors or agents of any kind, or by indirect advertisement, as by furnishing or inspiring newspaper comments concerning cases in which the physician has been or is concerned. All other like self-laudations defy the traditions and lower the tone of any profession and so are intolerable. The most worthy and effective advertisement possible, even for a young physician, and especially with his brother physicians, is the establishment of a well-merited reputation for professional ability and fidelity. This cannot be forced, but must be the outcome of character and conduct. The publication or circulation of ordinary simple business cards, being a matter of personal taste or local custom, and sometimes of convenience, is not per se improper. As implied, it is unprofessional to disregard local customs or offend recognized ideals in publishing or circulating such cards.

It is unprofessional to promise radical cures; to boast of cures and secret methods of treatment or remedies; to exhibit certificates of skill or of success in the treatment of disease; or to employ any methods to gain the attention of the public for the purpose of obtaining patients.

Sec. 5.—It is unprofessional for personal profit, to hold patents for surgical instruments or medicines; to accept rebates on prescriptions or surgical appliances, or prerequisites from attendants who aid in the care of patients.

Sec. 6.—It is unprofessional for a physician to assist unqualified persons to evade legal restrictions governing the practice of medicine; it is equally unethical to prescribe or dispense secret medicines or other secret remedial agents, or manufacture or promote their use in any way.

Sec. 7.—Physicians should expose without fear or favor, before the proper medical or legal tribunals, corrupt or dishonest conduct of members of the profession. Every physician should aid in safeguarding the profession against the admission to its ranks of those who are unfit or unqualified because deficient either in moral character or education.

Article II.—Professional Services of Physicians to Each Other.

Section 1.—Experience teaches that it is unwise for a physician to treat members of his own family or himself. Consequently, a physician should always cheerfully and gratuitously respond with his professional services to the call of any physician practicing in his vicinity, or of the immediate family dependents of physicians.

Sec. 2.—When a physician from a distance is called upon to advise another physician or one of his family dependents, and the physician to whom the service is rendered is in easy financial circumstances, a compensa-

tion that will at least meet the traveling expenses of the visiting physician should be proffered. When such a service requires an absence from the accustomed field of professional work of the visitor that might reasonably be expected to entail a pecuniary loss, such loss should, in part at least, be provided for in the compensation offered.

Sec. 3.—When a physician or a member of his dependent family is seriously ill, he or his family should select a physician from among his neighboring colleagues to take charge of the case. Other physicians may be associated in the care of the patient as consultants.

Article III.—Duties of Physicians in Consultations.

Section 1.—In serious illness, especially in doubtful or difficult conditions, the physician should request consultation.

Sec. 2.—In every consultation, the benefit to be derived by the patient is of first importance. All the physicians interested in the case should be frank and candid with the patient and his family. There never is occasion for insincerity, rivalry or envy and these should never be permitted between consultants.

Sec. 3.—It is the duty of a physician, particularly in the instance of a consultation, to be punctual in attendance. When, however, the consultant or the physician in charge is unavoidably delayed, the one who first arrives should wait for the other for a reasonable time, after which the consultation should be considered postponed. When the consultant has come from a distance, or when for any reason it will be difficult to meet the physician in charge at another time, or if the case is urgent, or if it be the desire of the patient, he may examine the patient and mail his written opinion, or see that it is delivered under seal, to the physician in charge. Under these conditions, the consultant's conduct must be especially tactful; he must remember that he is framing an opinion without the aid of the physician who has observed the course of the disease.

Sec. 4.—When a patient is sent to one specially skilled in the care of the condition from which he is thought to be suffering, and for any reason it is impracticable for the physician in charge of the case to accompany the patient, the physician in charge should send to the consultant by mail, or in the care of the patient under seal, a history of the case, together with the physician's opinion and an outline of the treatment, or so much of this as may possibly be of service to the consultant; and as soon as possible after the case has been seen and studied, the consultant should address the physician in charge and advise him of the results of the consultant's investigation of the case. Both these opinions are confidential and must be so regarded by the consultant and by the physician in charge.

Sec. 5.—After the physicians called in consultation have completed their investigations of the case, they may meet by themselves to discuss conditions and determine the course to be followed in the treatment of the patient. No statement or discussion of the case should take place before the patient or friends, except in the presence of all the physicians attending, or by their common consent; and no opinions or prognostications should be delivered as a result of the deliberations of the consultants, which have not been concurred in by the consultants at their conference.

Sec. 6.—The physician in attendance is in charge of the case and is responsible for the treatment of the patient. Consequently, he may prescribe for the patient at any time and is privileged to vary the mode of treatment outlined and agreed on at a consultation whenever, in his opinion, such a change is warranted. However, at the next consultation, he should state his reasons for departing from the course decided on at the previous conference. When an emergency occurs during the absence of the attending physician, a consultant may provide for the emergency and the subsequent care of the patient until the arrival of the physician in charge, but should do no more than this without the consent of the physician in charge.

Sec. 7.—Should the attending physician and the consultant find it impossible to agree in their views of a case, another consultant should be called to the conference or the first consultant should withdraw. However, since the consultant was employed by the patient in order that his opinion might be obtained, he should be permitted to state the result of his study of the case to the patient, or his next friend, in the presence of the physician in charge.

Sec. 8.—When a physician has attended a case as a consultant, he should not become the attendant of the patient during that illness except with the consent of the physician who was in charge at the time of the consultation.

Article IV.—Duties of Physicians in Cases of Interference.

Section 1.—The physician, in his intercourse with a patient under the care of another physician should observe the strictest caution and reserve; should give no disingenuous hints relative to the nature and treatment of the patient's disorder; nor should the course of conduct of the physician, directly or indirectly, tend to diminish the trust reposed in the attending physician.

Sec. 2.—A physician should avoid making social calls on those who are under the professional care of other physicians without the knowledge and consent of the attendant. Should such a friendly visit be made, there should be no inquiry relative to the nature of the disease or comment upon the treatment of the case, but the conversation

should be on subjects other than the physical condition of the patient.

Section 3.—A physician should never take charge of or prescribe for a patient who is under the care of another physician, except in an emergency, until after the other physician has relinquished the case or has been properly dismissed.

Sec. 4.—When a physician does succeed another physician in the charge of a case, he should not make comments on or insinuations regarding the practice of the one who preceded him. Such comments or insinuations tend to lower the esteem of the patient for the medical profession and so react against the critic.

Sec. 5.—When a physician is called in an emergency and finds that he has been sent for because the family attendant is not at hand, or when a physician is asked to see another physician's patient because of an aggravation of the disease, he should provide only for the patient's immediate need and should withdraw from the case on the arrival of the family physician after he has reported the condition found and the treatment administered.

Sec. 6.—When several physicians have been summoned in a case of sudden illness or of accident, the first to arrive should be considered the physician in charge. However, as soon as the exigencies of the case permit, or on the arrival of the acknowledged family attendant or the physician the patient desires to serve him, the first physician should withdraw in favor of the chosen attendant; should the patient or his family wish some one other than the physician known to be the family physician to take charge of the case the patient should advise the family physician of his desire. When, because of sudden illness or accident, a patient is taken to a hospital, the patient should be returned to the care of his known family physician as soon as the condition of the patient and the circumstances of the case warrant this transfer.

Sec. 7.—When a physician is requested by a colleague to care for a patient during his temporary absence, or when, because of an emergency, he is asked to see a patient of a colleague, the physician should treat the patient in the same manner and with the same delicacy as he would have one of his own patients cared for under similar circumstances. The patient should be returned to the care of the attending physician as soon as possible.

Sec. 8.—When a physician is called to the patient of another physician during the enforced absence of that physician, the patient should be relinquished on the return of the latter.

Sec. 9.—When a physician attends a woman in labor in the absence of another who has been engaged to attend, such physician should resign the patient to the one first engaged, upon his arrival; the physician is entitled to compensation for the professional services he may have rendered.

Article V.—Differences Between Physicians.

Section 1.—Whenever there arises between physicians a grave difference of opinion which cannot be promptly adjusted, the dispute should be referred for arbitration to a committee of impartial physicians, preferably the Board of Censors of a component county society of the American Medical Association.

Article VI.—Compensation.

Section 1.—The poverty of a patient, the mutual professional obligation of physicians and certain public duties should command the gratuitous services of a physician. A physician should also give his services to a selected group of eleemosynary institutions, but institutions endowed by the public, or by the rich, or by societies, and organizations for mutual benefit, or for accident, sickness and life insurance, or for analogous purposes should be accorded no such privileges.

Sec. 2.—It is unprofessional for a physician to dispose of his services under conditions that make it impossible to render adequate service to his patient or which interfere with reasonable competition among the physicians of a community. To do this is detrimental to the public and to the individual physician, and lowers the dignity of the profession.

Sec. 3.—It is detrimental to the public good and degrading to the profession, and therefore unprofessional, to give or receive a commission or to divide a fee for medical advice or surgical treatment, unless the patient or his next friend is fully informed as to the terms of the transaction. The patient should be made to realize that a proper fee should be paid the family physician for the service he renders in determining the surgical or medical treatment suited to the condition, and in advising concerning those best qualified to render any special service that may be required by the patient.

Chapter III.—The Duties of the Profession to the Public.

Section 1.—Physicians, as good citizens and because their professional training specially qualifies them to render this service, should give advice concerning the public health of the community. They should bear their full part in enforcing its laws and sustaining the institutions that advance the interests of humanity. They should cooperate especially with the proper authorities in the administration of sanitary laws and regulations. They should be ready to counsel the public on subjects relating to sanitary police, public hygiene and legal medicine.

Sec. 2.—Physicians, especially those engaged in public health work, should enlighten the public regarding quarantine regulations; on the location, arrangement and dietaries of hospitals, asylums, schools, prisons and similar institutions; and concerning measures for the prevention of epidemic and contagious diseases. When an epidemic pre-

vails, a physician must continue his labors for the alleviation of suffering people, without regard to the risk to his own health or life or to financial return. At all times it is the duty of the physician to notify the properly constituted public health authorities of every case of communicable disease under his care, in accordance with the laws, rules and regulations of the health authorities of the locality in which the patient is.

Sec. 3.—Physicians should warn the public against the devices practiced and the false pretensions made by charlatans which may cause injury to health and loss of life.

Sec. 4.—By legitimate patronage, physicians should recognize and promote the profession of pharmacy; but any pharmacist, unless he be qualified as a physician, who assumes to prescribe for the sick, should be denied such countenance and support. Moreover, when a druggist or pharmacist dispenses deteriorated or adulterated drugs, or substitutes one remedy for another designated in a prescription, he thereby forfeits

all claims to the favorable consideration of the public and physicians.

Conclusion.

While the foregoing statements express in a general way the duty of the physician to his patients, to other members of the profession and to the profession at large, as well as of the profession to the public, it is not to be supposed that they cover the whole field of medical ethics, or that the physician is not under many duties and obligations besides those herein set forth. In a word, it is incumbent upon the physician that under all conditions his bearing toward patient, the public and fellow practitioner should be characterized by a gentlemanly deportment, and that he constantly should behave toward others as he desires them to deal with him. Finally, these principles are primarily for the good of the public, and their enforcement should be conducted in such a manner as shall deserve and receive the endorsement of the community.

DEPARTMENT OF EUGENICS

Mrs. Mary E. Teats, in "The Way of God in Marriage," referring to the asexualization of degenerates, writes: "No one regrets more than myself the necessity of such strenuous recommendations. Had I studied humanity and its needs and sorrows less, I might object as many excellent people do, to a resort to such strong measures. However I still maintain that until we can secure an intelligent and educated parentage, it is our duty to safeguard the child of the future by placing the ABSOLUTE DEGENERATES past the possibilities of reproducing their kind, and this plan should include women as well as men. Their cases should be passed upon by an examining board of competent, conscientious physicians, as in the case of insane persons. Let us think on these things, with an eye single to the glory of God and the betterment of humanity."

ASEXUALIZATION.

The Medico-Legal Journal of New York says: So much interest is felt in this subject and the various problems relating to asexualization and vasectomy that we feel our readers will be greatly interested to see the views expressed by H. Havelock Ellis, in his recent contribution to the London Lancet. We take pleasure in giving the letter entire:

A QUESTION IN EUGENICS.

To the Editor of the Lancet:

Sir: Many of your readers have carefully followed the discussion of this question in your pages. We have, I trust, derived benefit, but the actual enlightenment is less than many of us hoped for.

The original question was specific and definite. Is a father, acting in the interests of an epileptic son under age, entitled to procure an operation which will prevent that son from becoming a father? It is a question that will, before long, demand an answer. But it has not so far received an an-

swer. The stream of heart-felt eloquence at high pressure directed against your columns seems, indeed, to have washed the question away. Certainly it is satisfactory to know that there are members of the profession who wear their hearts upon their sleeves, and still more satisfactory to be assured that the emotions contained in those hearts are of so lofty a character. But we never doubted it. These emotions are beside the mark. The question is one that can only be discussed profitably in the dry light of intelligence. Moreover, it demands precise knowledge.

It is surprising to find that several of your correspondents imagine that a question of this kind can be dismissed by talking about a supposed abstract conflict between the "individual" and the "race." A concrete question demands a concrete answer. In this case the possible father is an "individual"; the possible children would also be "individuals." The children of this father are likely to involve a special burden of anxiety

and expense, while his own condition will render him unfit to cope with that burden. Under such conditions the children are likely to be a misery to themselves and others. There is no conflict here between the "individual" (the possible father) and the "race" (the possible children). Their interests are identical. Evidently it is dangerous to plunge into academic disquisitions of a pseudo-metaphysical character when asked to reply to a simple concrete question.

There is another point on which some of us feel that we have been led astray. No doubt there is a wide range of variation in what the phrenologists call philo-progenitiveness. But in some of your correspondents this bump must be developed to a really alarming extent. It is good to have children, so long as one is reasonably assured that these children will be well-born, and that one is able to provide for them. But it is another matter to have children at all costs. We must not allow our philo-progenitive impulses to grow so hysterical that we become unable to see that many people remain and lead useful lives without children, and even with no prospect of children. I have elsewhere recorded the case of a medical man who having as many children as he desires and wishing to avoid the unpleasant routine of preventive methods, has had vasectomy performed with results that are highly satisfactory both to himself and his wife. Now, many will consider that in such a case the operation was not called for. But supposing the subject had been a man of profoundly neurotic constitution, there ought surely to be little difference of opinion, even though vasectomy had been performed at the outset of sexual life. In many cases, it is probable, sterilization and freedom will prove the only proper alternative to isolation without sterilization. "Life under such conditions is not worth living," exclaims one of your correspondents; he would rather retire to a colony of degenerates. Very well. Chacun a son gout.

It is not easy to feel enthusiasm about sterilization, any more than about any other operation for the relief of suffering humanity; it would be better to avoid the need for it, and its scope must always be limited. It is surprising, therefore, to find that one of your correspondents has so much faith in the enormous effects of asexualization that he fears lest, by abolishing human suffering, it will remove the need for moral helpfulness. One may note in passing that the "moralist" who would perpetuate human mis-

ery in order to cultivate his own moral helpfulness is a "moralist" who must be severely isolated in inverted commas. (Let me add that I am sure he does himself an injustice and is the victim of his own controversial ingenuity.) But this fear is uncalled for. Every one who is acquainted with the actual condition of things today knows that, far from being threatened by the disappearance of the need for moral helpfulness, we are being overwhelmed by the burdens involved by our moral helpfulness. The favor with which sterilization is now viewed is largely due to the hope that, if wisely and discriminately carried out, it may help us to cope with those burdens.

It is not, I believe, quite correct that sterilization has been "legalized" in Switzerland. The reference is probably to the operations performed at the Cantonal Asylum of Wil. (The portion of the sixteenth annual report of the asylum dealing with the matter is reproduced in the *Psychiatrisch-Neurologische Wochenschrift*, No. 2, 1909.) In these cases the operation (actual castration,) carried out on two men and two women, was performed not only by agreement with the relatives and the local authorities, but with the eager consent of the patients themselves, who were thus enabled to return to freedom and to work. No compulsion being exercised, no legislation was necessary. This is as it should be. There are very serious objections to compulsory sterilization.

The discussion has made it clear not only that it is desirable (let me repeat) to cultivate the dry intelligence, but also that an extended knowledge of the elementary facts of sexual physiology and psychology would be highly advantageous. Here we see a medical man who apparently confuses vasectomy with castration; there another who believes that vasectomy is fairly comparable with crypt-orchidism; again, a third who, one suspects, imagines that sterilization involves impotence. It is also evident that some among us, however young in years, are still living in the past, not realizing what men and women are thinking and doing to-day, nor the ideals which are inspiring them.

In these matters of eugenics the growth of both general and professional opinion (even since the Royal Commission on the Feeble-minded issued its report three years ago) is most remarkable to those who watch the development of opinion. It is idle to ignore it. I am, Sir,

Yours, faithfully,

H. HAVELOCK ELLIS.

STERILIZATION OF DEGENERATE CRIMINALS AND THE INSANE.*

EDWIN F. BOWERS, M.D.,

Hartford, Conn.

We are rapidly coming to realize that our poorhouses, asylums and penitentiaries are recruited from the defective class.

Alienists recognize inherited defects culminating in insanity, epilepsy and various forms of degeneracy. Sanger Brown, in speaking of this predisposition, says that the phenomena which it presents may be readily accounted for by assuming a defect in the neurons (cell units of which the nervous system is composed) of such a nature that stimuli from environment may not reach them, or, having done so, the impression made there may not be sufficiently deep and lasting, or, in other words, well elaborated. Keeping in mind this condition of neuronal defects, it is easy to understand how certain individuals fail to respond to educational influence, moral or intellectual, or both.

A defect differs from a disease in this respect: that a disease is usually curable, while a defect is permanent. For instance, if a child is born with gonorrheal ophthalmia, it can be cured, but if born imbecile or hydrocephalic, this constitutes a defect, and is usually incurable.

As an illustration of the perpetuation of ancestral traits, both virtuous and vicious, permit me to call your attention to the following statistical records: "The Jukes, a Study in Crime, Pauperism and Heredity," by R. L. Dugdale, throws an illuminating light on this question. The ancestor of this infamous family was born of Dutch parentage, in what was then the outskirts of New York, about 1730. He was a hunter and fisherman, a drunkard, working intermittently, lived to an extreme age, and left an enormous progeny. Of these direct descendants, 709 have been traced. The family, while it has included a certain number of honest workers, has been on the whole a family of criminals, prostitutes, vagabonds and paupers. Of the 709, there were 76 criminals. Of the females, more than one-half were abandoned women, 52.41%—while the normal average has been found to be 1.66%. The Jukes family cost the state of New York \$1,250,000, without considering the awful legacy of crime and criminals with which the state still has to deal.

By way of contrast, turn to the history of the Edwards families of New England. Data can be found in Boile's "Science of Penology," Jonathan Edwards was born in East Windsor, Conn., in 1703; 1394 of his descendants were identified by record in 1900, of whom the data show 295 were college graduates, 13 were presidents of our greatest colleges, 65 were professors in colleges, 60 were physicians, many of whom were eminent; 100 or more were missionaries, clergymen and theo-

logical professors; 60 were eminent authors, 100 or more were lawyers, 80 held public offices, of whom one was vice-president of the United States; three were United States senators, several were governors, members of congress, mayors of cities and ministers to foreign ports. Almost every department of social progress and of public weal has felt the impulse of this healthy and long-lived family. It is not known that any one of them was ever convicted of a crime.

These records are an unimpeachable demonstration of the strength of heredity in perpetuating ancestral traits, both virtuous and criminal.

Dr. H. C. Sharpe says that the children of syphilitics are almost sure to be defectives. Alcoholism, drug habits, and immoral excesses are some of the common causes of mental and nervous exhaustion which render a person incapable of begetting normal children. Overwork and many physical maladies which produce in the sufferer a profound mental depression, are also responsible for defective offspring. Thus it is that we frequently find the children of ministers, lawyers, doctors and other professional and highly respected business men have pronounced disorganized minds, manifesting the same by immoral, criminal or insane acts. Hence the necessity for a clearer comprehension of eugenics. Also education—in respect to the grave responsibilities of parental influence, prenatal or maternal impressions, and scientific, child-breeding and nurture—is urgently demanded by exigent conditions.

It is safe to say that every honest man or woman who understands the profound effect of debility, nervous exhaustion, or latent inherited neuronal conditions, will refrain from perpetuating these conditions—possibly a hundred-fold magnified—in their offspring. Every child has an inalienable right to be well born. This fact will be universally recognized in time. With the irresponsible, the weak, vicious, criminal and degenerate, who seek but the temporary gratification of sexual desire, regardless of all consequences, there remains, to my mind, but one course to be pursued.

Segregation has been advocated, and has been practiced with some small degree of success. But it is obvious that the penalty is out of all proportion to the crime. As Omar Khayam says:

"What? from his helpless creature be repaid
Pure gold for what he lent him, dross allayed,
Sue for a Debt he never did contract
And cannot answer; Oh: the sorry trade."

Next to the instinct of self-preservation—perhaps stronger, in some instances—is the

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procreative desire, and Mrs. Partington stood an infinitely better chance of being successful in her efforts to sweep back the incoming tide, than would be any restrictive legislation directed against procreation.

Marriage of defectives has been forbidden by Minnesota, Michigan, Delaware, Connecticut, Indiana, New Jersey and North Dakota; and legislation to this end is pending in several other states, but, unfortunately, marriage is not necessary to propagation. The undesirables continue to perpetuate their kind, the only difference being that now illegitimacy is added to degeneracy.

What do we propose to do about it? There is a remedy, an absolutely safe, certain remedy. It consists in the very simple operation of vasectomy in the male, and either oophorectomy or ligation of the Fallopian tubes in the female.

Dr. C H Sharpe of Indianapolis, Ind., is the originator—so far as I know—of the operation of vasectomy. He says: "Since October, 1899, I have been performing an operation known as vasectomy, which consists of ligating and resecting a small portion of the

vas deferens. This operation is very easy to perform. It requires about three minutes time, the subject returns to his work immediately, suffering no inconvenience, and is in no way hampered in his pursuit of life, liberty and happiness, but is effectually sterilized. I have been doing this operation for over nine years. I have 456 cases that have afforded splendid opportunity for post-operative observation, and I have never seen any unfavorable symptoms. The patient evinces a more sunny disposition, is brighter of intellect, and advises his fellows to submit to the operation for their own good. And here is the point in which this method of preventing procreation is so infinitely superior to all others proposed—that it is endorsed by the persons subjected to it. All other methods place restrictions and, therefore, punishment on the subject; this treatment absolutely does not."

Therefore, it follows that if we continue to permit confirmed criminals, degenerates, and the insane to breed, it is because we lack intelligence and "gumption" to prevent it. We have a feasible, painless, satisfactory remedy.

THE YOUNG MOTHER AND THE FAT HOG—NOT A FABLE.

J. N. HURTY, M.D.,

Indianapolis, Ind.

(State Health Commissioner of Indiana.)

One time a little mother, who was only twenty-five years old, began to feel tired all the time. Her appetite had failed her for weeks before the tired feeling came. Her three little girls, once a joy in her life, now became a burden to her. It was—"Mamma, mamma," all day long. She had never noticed the appeals until the tired feeling came. The little mother also had red spots on her cheeks and a slight dry cough. One day, when dragging herself around, forcing her weary body to work, she felt a sharp but slight pain in her breast, her head grew dizzy, and suddenly her mouth filled with blood. The hemorrhage was not severe, but it left her very weak. The doctor she had consulted for her cough and tired feeling had said: "You are all run down, you need a tonic." For a fee he prescribed bitters made of alcohol, water and gentian. This gave her false strength for a while, for it checked out her little reserve. When the hemorrhage occurred she and all her neighbors knew she had consumption, and the doctor should have known it and told her months before.

Now she wrote to the State Board of Health and said: "I am told that consumption in its early stages can be cured by outdoor life, continued rest and plenty of plain, good food. I do not want to die. I want to live and raise my children to make them good citizens. Where can I get well?"

The reply was: "The great Christian state of Indiana has not yet risen to the mighty economy of saving the lives of little mothers from consumption. At present, the only place where you can go is a grave. However, the state will care for your children in an orphan's asylum after you are dead, and then in a few years a special officer will find a home for them. But save your life—never. 'That is a cranky idea,' for a member on the floor of the Sixty-fifth Assembly said so. 'Besides,' said he, 'It isn't business; the state can't afford it.'" So the little mother died of the preventable and curable disease, the home was broken up and the children were taken to the orphan's asylum.

But:—

A big fat hog one morning found he had a pain in his belly. He squealed loudly and the farmer came out of his house to see what was the matter. "He's got the hog cholery," said the hired man. So the farmer telegraphed to Secretary Wilson of the U. S. Agriculture Department (who said the other day he had 3,000 experts in animal and plant diseases), and the reply was, "Cert, I'll send you a man right away." Sure enough the man came. He said he was a D. V. S., and he was, too. He had a government syringe, and a bottle of government medicine in his handbag, and he went

for the hog. It got well. It wasn't cranky for the government to do this, and it could afford the expense, for the hog could be turned into ham, sausage, lard and bacon.

Anybody, even a fool, can see it would be

cranky for the state to save the life of a little mother, and it could not afford it either.

Moral: Be a hog and be worth saving.
—Medical Herald.

MEDICAL NOTES AND ITEMS

THE PROGRESSIVE HEALTH PLANK.

We favor the union of all the existing agencies of the federal government dealing with the public health into a single national health service without discrimination against or for any one set of therapeutic methods, school of medicine, or school of healing, with such additional powers as may be necessary to enable it to perform efficiently such duties in the protection of the public from preventable disease as may be properly undertaken by the federal authorities; including the execution of existing laws regarding pure food; quarantine and cognate subjects; the promotion of appropriate action for the improvement of vital statistics and the extension of the extension of the registration area of such statistics; and co-operation with the health activities of the various states and cities of the nation.

This should be considered and read as

part of Dr. Servoss editorial on the Planks in this issue.

The Utah County Medical Society met at Provo on August 14th with President H. E. Robinson of American Fork in the chair. The paper was by Dr. Joseph Hughes of Spanish Fork and entitled "The Profession's Relation to the Moral Uplift of the Community."

Dr. August Rauscher, graduate of the University of Vienna, 1855, and resident of South Cottonwood since 1882, died at the home of his sister-in-law, Mrs. Marie Rauscher, in South Cottonwood, Murray. Dr. Rauscher was nearly eighty years old. He was a member of the county and state medical societies and of the American Medical association. He was born in Austria in 1833, and came to Utah in 1882. He is survived by a daughter, who lives in Austria.

MISCELLANY

A CURIOUS AND COMPLICATED CASE.

Editor Denver Medical Times:—

One of your subscribers, sojourning temporarily in the hills near Denver, was called upon recently to diagnose and prescribe for a certain case. The physician found the patient up and dressed and walking about. She complained, however, of pain upon walking, relieved upon lying down a while.

For the inspection of the doctor, she displayed a somewhat swollen but shapely calf, stating that that was the region that gave her the trouble. The symptoms, and the finding of a large knot of varicose veins on the posterior surface of the leg above the bend of the knee, gave the key to the diagnosis. Treatment was prescribed accordingly.

Within a day or so, the young woman, who had been serving as maid in the family, and who had meanwhile returned to the city, came down with an attack of pneumonia. Her mistress is now bruiting about the report that the doctor made a very grave error in the diagnosis.

Footnote:—We would advise, when pneumonia in the calf (of a leg) sets in, that a veterinary be called. Pneumonia in that region is a disease new to medical science, and we would suggest, also, that this remarkable case of vicarious lung affection be fully reported by the lady aforesaid.

—Medicus.

Dear Doctor: Have you seen the booklet I give Prospective Mothers? If not, a great surprise awaits you. 7,000 words of sound, safe, sensible advice attractively bound. Your name and address on the front cover. Sold to only one physician in a town. They make my work easier, satisfy my patrons and bring new ones. Sent prepaid. Strictly ethical or could not be advertised in this journal. Send 10c for sample copy. Dr. E. S. Harris, Box 527, Blue Springs, Mo.

Salt Lake City, Utah.—In the twenty-one years of the history of the National Irrigation congress, there never has been another time when such widespread interest was manifested in the splendid work of that organization as is now shown in its twentieth session, which is to be held in this city September 30 to October 3, 1912.

There is cause for this nation wide interest, because out of the irrigation enterprises promoted and fostered under advocacy of the congress has come magnificent contributions to the wealth of the country. Not only have the arid land states received benefit from the activities of the congress, but every other commonwealth in the Union has been directly or indirectly a beneficiary.

At the approaching session, according to the official call sent out by President Francis G. Newlands and Secretary Arthur Hooker, there is to be consideration of further matters directly affecting the welfare of the country. To be considered are the best methods for storing flood waters and measuring streams; provision for scientific investigation of irrigation projects; uniform irrigation laws; the preservation of the forests; opportunities for building new homes; elimination by law of fraud in connection with the location and sale of land; close co-operation of government and state immigration officials; co-operation among state engineers; heeding the call of the landless man for the manless land.

In the realm of amusement, too, there will be diversion in a magnificent illuminated parade, the re-advent of the Wizard of the Wasatch with his gay pageantry, singing of the Ode to Irrigation at the famous Mormon tabernacle, expositions of agricultural, horticultural, livestock, mining and manufactured products. There will also be the crowning of the Irrigation Queen, who is to be selected from among the beautiful women of the mountain west. The parades will be characterized by magnificent floats representing the growth and present splendor of the country's industrial progress.

Major Richard W. Young, chairman of the executive committee, and Geo. A. Snow, chairman of the Utah Board of control, are making every provision for proper entertainment of guests during the convention period, and their efforts are generously supported by the governor of Utah, boards of county commissioners, officials of smaller cities and towns, and the mayor, commissioners and commercial club of the city of Salt Lake.

It was in Utah sixty-five years ago that

the modern system of irrigation had its small beginning.

And it was in Salt Lake City twenty-one years ago that the National Irrigation Congress held its first session. On these accounts the twentieth session of the congress is attracting to itself the appreciation and interest of the entire country.

DO YOU BELIEVE THE WORD OF SEVERAL THOUSAND PHYSICIANS?

If several thousand doctors told you that in Pasadyne, a distinctive tincture of *passiflora incarnata*, they had found a most efficient substitute for chloral and the bromides, and that they had given up these latter drugs, would you believe them? While several thousand doctors will never tell you this, yet they could if an opportunity ever presented itself, for it is a fact. Gradually, during the last thirty-eight years, physicians, who have investigated the merits of Pasadyne (Daniel's Concentrated Tincture of *Passiflora Incarnata*), have become users of it in preference to chloral and the bromides, for they have found it to possess just as much therapeutic activity as the drugs named and to be free from their dangerous after-effects. The possibility of habit-formation does not attach to the use of Pasadyne, nor is it depressing. It is the ideal sedative and soporific. A sample bottle will be furnished if application be made to the Laboratory of John B. Daniel, Atlanta, Ga.

The Post-Typhoid Tonic. It is usually at this season of the year that Typhoid Fever exhibits its maximum incidence, especially in the larger cities. One probable reason for this is the return of the army of families to city homes from the many more or less unsanitary summer resorts in country districts during the stage of incubation, and the subsequent development of the characteristic symptoms of the disease. As every physician realizes, the systemic poisoning is usually profound and the duration of the infection is such that the organism is almost always distinctly depreciated and devitalized after the four, five or six weeks febrile period. This condition of general systemic depression at the beginning of convalescence certainly indicates the necessity of reconstructive measures. As soon as it is safe to gradually increase the patient's dietary, it is also wise to commence tonic and hematinic treatment. Care must be

taken, however, to avoid derangement of the digestion, and for this reason, *Pepto-Mangan* (Gude) is especially indicated as the most efficient, readily tolerable and generally efficient reconstructive and hematinic. This organic combination of the peptonates of iron and manganese never creates aversion, destroys the appetite nor causes gastro-intestinal irritation. Through its regular use Typhoid Convalescence is promoted and distinctly hastened.

Now It's Typhoid.—With each new season come new problems for the doctor. Now it's typhoid that he is called to meet.

Have you ever stopped to think of the devastation worked by this plague, which, as F. C. Walsh says in the *Technical World*, with "the silent legions of death rides through our land unnoticed?" Over three hundred thousand people are taken down with typhoid fever annually, and more than thirty-five thousand lives are sacrificed—needlessly.

Compared with this record, yellow fever, cholera and bubonic plague sink into insignificance. One year fifteen thousand persons lost their lives from yellow fever—but that was thirty-four years ago! Seven years ago we had another "great" epidemic of yellow fever, in which 451 people perished! But every year, in every state, in every city and county in America typhoid fever is taking its tribute from among the strongest and best of the nation—and we go peacefully about our work, taking the flattering unction to our souls that "nothing can be done." Thirty-five thousand needless deaths every year,—an annual economic loss of three hundred million dollars. Think of it!

Typhoid fever can be prevented. European cities have reduced the mortality to an average of about 3 to 100,000 people, as compared with our 30 to 50 to the 100,000.

And typhoid fever can be cured. Those who are satisfied to "let the disease take its course" may be content to go about its treatment in the same old way, and with the same old results, but there are many physicians who are demanding better methods. Hence, a few words on how best to handle this disease will no doubt find welcome, especially among the late arrivals in the field of practice who, though saturated with book knowledge, are yet lacking in experience.

The mainstay of most successful doctors, we have found, is Intestinal Antiseptic (Vaugh-Abbott). It should be given in liberal doses, after the initial purge, and kept up till there is a decided change for the better. Let the stools be your guide. Persist until they have lost their foulness and in consistence, etc., have again the semblance of the normal stool.

It is important to feed properly. Some rely mainly on fruit juices; others on milk. Experience shows that milk in its curdled form (using a lactic ferment such as Galactenzyme), is preferable to the ordinary milk. It is more digestible. Sweet milk tends to form large, hard curds in the alimentary tract which mechanically irritate the surface over which they pass, producing dangerous distension at times in consequence of fermentation and accumulation, and not infrequently perforating the bowel!

A pure "buttermilk" containing *B. Bulgaricus* not only provides sustenance but acts as a check to the infection.

We advise our readers to write The Abbott Alkaloidal Company for information along this line.

The Power to Recuperate resident in the tissues, may be markedly augmented by Cord. Ext. Ol. Morrhuæ Compound (Hagee), and with many physicians it is a routine practice to employ it for this purpose.

The usefulness of Cord. Ext. Ol. Morrhuæ Comp. (Hagee) as a reconstructive lies in the nutritious elements contained, which when fed to impaired tissues build up and strengthen them. Each fluid ounce of the Cordial represents the extract obtainable from one-third fluid ounce of cod liver oil (the fatty portion being eliminated), 6 grains calcium hypophosphite, 3 grains sodium hypophosphite, with glycerin and aromatics. It is free from grease and the taste of fish.

Free Iodin in Syphilis. The treatment of syphilis has long been dependent upon mercury and potassium iodide. This last combination of iodine with an alkaline element, potassium, is unnecessary and often harmful. Through Soluble Iodine (Burnham's) it is possible to administer free iodine in a readily soluble form, which permits its entire appropriation by the system without the effects of any needless or harmful element.

Iodine thus employed exhibits its full physiological action without the slightest systemic disturbance, causes no deleterious change or profound and dangerous reaction in the general condition of the patient, and what is of greater importance in scientific therapy, allows gradual increase or variation of its dosage to meet the exact needs of each individual patient.

It is a noteworthy fact that there are no local or general undesirable effects from the use of Soluble Iodine (Burnham's) in appropriate doses, such as almost always sooner or later become manifest from the administration of potassium iodide in even partially effective amounts.

The Storm Binder. Dr. Katherine L. Storm, who several years ago patented the Storm Binder, has recently obtained patents in England and Canada on this supporter, also another patent in the United States, for improvements that have been made to meet the extended requirements for a high belt for floating kidney, ptosis, etc., with a minimum of pressure, heat and weight across the back of the patient.

It can be truthfully said that more Storm Binders are being sent out to every state in the Union, Canada and Mexico than can be claimed for any other one make on the market. Such an increase speaks eloquently for the practical value of this supporter. Physicians test new appliances, but a seven years' trial proves the worth of an article, and the same physicians are prescribing it today that used it in the beginning, although the use of post-operative belts has been so largely done away with. It is a great support, therefore it is adapted to any use where support is needed, whether for a ptosis or a weakened abdominal wall, and the fact is the physicians like it and increasingly call for it. Manufactured in Philadelphia, 1541 Diamond Street.

Bacterins.—In order further to popularize the demand for Bacterins (Bacterial Vaccines), and enable physicians to make more general use of these products, we call attention to the downward revision of prices on Mulford Bacterins, effective August 5th.

The Mulford Bacterins are in every case "polyvalent," which means that the bacteria contained in a Bacterin, although of the same species, are obtained from many different sources. For instance, Strepto-Bac-

terin is polyvalent, the bacteria used for its preparation are all streptococci and are isolated from different patients suffering with streptococcic infections, among which may be mentioned puerperal sepsis, general septicemia, erysipelas, tonsillitis, empyema, cellulitis, etc.

A number of the Mulford Bacterins are "mixed," by which is meant that they contain the various bacterial species generally present in a mixed infection. For instance, the mixed Vaccine of chronic gonorrheal infections, besides the gonococcus, contains various staphylococci, colon bacilli, streptococci, and other organisms isolated from cases of chronic urethritis and prostatitis.

In some cases, diseases from their inception are due to mixed infections, while in many others the infection becomes a mixed one as the disease develops. Past experience and results have fully established the advantages claimed for these "polyvalent" and "mixed Bacterins."

Hay-Fever Hints.—We are now well into the season when the services of the physician are urgently demanded by the victim of vasomotor rhinitis—a season dreaded not alone by the patient, but, not uncommonly, by his medical adviser as well. Particularly is this true of the latter if he has not kept abreast of the most modern ideas on the therapy of hay fever. In any event the disease is one that tries the patience and calls for the application of remedial agents that have been proved beyond peradventure.

In the treatment of hay-fever the physician rarely has an opportunity for the application of preventive measures. His help is usually sought only after the attack has manifested itself—when the patient is suffering (acutely, in most cases), from the ravages of the disease. Effective treatment is then demanded—and promptly, too. Administration of the suprarenal substance in the form of its isolated active principle, Adrenalin, is undoubtedly the wise procedure at this juncture. One feels safe in saying this in view of the long and effective service which has been rendered by this agent in critical emergencies.

There are a number of forms in which Adrenalin is successfully used in the treatment of hay-fever. Adrenalin Chloride Solution and Adrenalin Inhalant come naturally to mind in this connection. The substance is also incorporated in the several

Anethone preparations — in Anesthone Cream, Anesthone Inhalant, and Anesthone Tape,—all worthy of confidence, and especially worthy of trial in cases in which for any reason the older Adrenalin products seem not to be indicated. The Adrenalin and Anesthone products, as is well known perhaps to most physicians, are manufactured by Parke, Davis & Co. An exposition of their uses in the malady in question, together with the technique of administration, is now appearing in the commercial pages of the leading medical publications. Practitioners are advised to consult these current announcements.

The Prevention of Dysmenorrhea.—How can we prevent dysmenorrhea? It can be done by keeping the patient under morphine, but this is a barbarous solution of an important problem. It in fact does not solve it. Morphine is inadmissible and improper in these cases. It produces derangement of the secretions and tends to establish a drug habit that will make life a burden. I have long employed a remedy that not only relieves the pain, but produces no habit and is not dangerous. I refer to Dioviburnia. It is a most valuable uterine tonic, antispasmodic and anodyne of exceptional worth. I rely upon this remedy to prevent dysmenorrhea, which, as Professor Davenport truly says, is seen in almost all, if not in all, women. I have my patients who suffer with dysmenorrhea to take Dioviburnia, beginning two days before menstruation is due, and persist in it until the period has passed. I give it in doses of one to two teaspoonfuls every three hours throughout this time. When this direction is followed I have found that my patients go through the period without pain. The adoption of this treatment, I may say also, has brought me many grateful compliments. Where the patient is very nervous, having the tendency to hysteria, neurosis or uterine congestion, I administer Neurosine one part, in combination with two parts of Dioviburnia, which always gives relief.—L. G. Boyd, M.D.

Functional Heart Disease.—It has long been known that Cactina Pillets are especially serviceable in all functional disorders of the heart, as well as in certain phases of common organic lesions. They are safe, reliable, and do not manifest a cumulative action. Associated with digitalis, Cactina Pillets act as a valuable synergist, making

possible the use of much smaller doses of digitalis in the production of desired effects. As has been previously said, Cactina Pillets improve cardiac nutrition. Under its use the heart's action is slowed and materially strengthened. No miraculous claims have ever been made for Cactina Pillets, but in suitable cases clinical experience has repeatedly demonstrated its extraordinary value as a persuasive tonic.

Elixir Maltopapsine.—This preparation affords the physician a convenient and agreeable form of introducing salicylates into the system in the rather wide range of gouty, rheumatic and lithemic affections. Thus administered the salicylates are tolerated by the most delicate stomach by reason of the action of the Maltopapsine. It causes no depressant action upon the heart, for any untoward results that might accrue from the salicylates and antipyretic elements are precluded by the presence in each dram of 1-100 grain of strychnine. Prepared for physicians' prescriptions only at the laboratory of The Tilden Company, New Lebanon, N. Y.

The Ice Bag in Appendicitis.—In a most interesting article by A. M. Fauntleroy, a Surgeon in the United States Navy, Medical Record, Aug. 3, 1912, the fact is brought out, basing the same upon a large number of cases of appendicitis operated, that the ice bag is positively harmful in this condition. In 50 per cent of the cases operated, where the ice bag was used, the condition seemed to indicate that there was a noticeable lack of effort on the part of nature to wall off, from the rest of the abdominal cavity, the appendix, which was frequently very much congested, gangrenous or perforated. He also observed that in the ice bag cases there was a surprisingly low white cell count when one took into consideration the condition found in the abdomen at the time of the operation. From 8,000 to 11,000 white cells was the rule in these ice bag cases when one would be justified in saying that the pathological condition warranted a constitutional reaction of from 20,000 to 30,000 leucocytes, or even higher.

On the other hand, in those cases in which the hot water bag or morphine had been used prior to operation (the ice bag not being used at all), the white count corresponded to what one would expect. Dr.

Fauntleroy advances from his findings the logic that while the ice bag causes numbness, practically the same as in the condition of frost-bitten ear or toe, it also decreases hyperemia, leucocytosis and stasis in the part to which it is applied. That heat is the direct antithesis of cold in encouraging favorable physiological action in inflammatory processes, whether superficial or peritoneal, seems to be from his report most logically proven.

In applying heat, whether it be for peritoneal or inflammatory conditions of a more superficial character, the most rational method is to use that which is not only sanitary, but, for the comfort of the patient does not require frequent changes. In this respect, antiphlogistine, on account of its heat retentive properties, its cleanliness, and its ease of application, should appeal to the professional mind. That antiphlogistine has proven of great therapeutic value as a thermic agent is best indicated by its extensive professional employment and its many advantages over the hot water bottle and other methods of application of heat is readily discernible.

Sodium Salicylate the Remedy for Rheumatism.—When a diagnosis of rheumatism has been made, it then behooves one to cast about for some agent that will quickly arrest the process and avert complications. For this, one remedy stands out pre-eminently—namely, salicylates. Preference should be given the sodium salt. Some do not regard this favorably, and it is these who have an instrument they do not know how to wield. Plehn has pointed out the "stumbling block" for these, showing that success depends upon adequacy of dosage, and he further observes that the salicylates are as much a specific in acute articular rheumatism as quinine in malaria or mercury in syphilis.

One strong objection advanced is the inability of the patient to retain the medication because of the nauseating effect. Sodium salicylate has a very sickening sweet taste and should never be administered except in the form of a solution.

The natural salicylic acid in Tongaline will not cause the disturbances that accompany the use of the synthetic product, which is invariably dispensed unless the natural salicylic acid is specified. Hence Tongaline is a most desirable vehicle for the administration of natural salicylic acid.

Treatment of Surgical Tuberculosis by Dioradin.—Dr. R. Atkinson Stoney, visiting surgeon of the Royal City of Dublin Hospital, in an article on the "Treatment of Surgical Tuberculosis by Dioradin" (Medical Press and Circular, March 27, 1912), gives his results in fifteen cases of surgical tuberculosis treated with this remedy at the Royal City of Dublin Hospital. The paper was first read before the Section of Surgery of the Royal Academy of Medicine in Ireland.

Dr. Stoney gives a complete and thorough report of the fifteen cases treated and states that his "results are decidedly good, and certainly better than any he has ever obtained by the use of tuberculin in any of its many forms."

The cases treated were very severe, and we give here merely the final results obtained: Case 1 is apparently perfectly well after her second course of injections. Case 2 has had second course; the urine had been found normal on several occasions; patient can retain urine for about six hours, has only occasional momentary pain at intervals of a fortnight, and has gained nearly seven pounds in weight; the glands in the neck have become much smaller. Case 3 is in much the same condition; a fresh abscess collected and had to be opened; is now starting on his third course. Case 4—Condition much the same at the end of the second course. Case 5—Not heard from since leaving hospital; practically cured. Case 6 has had second course and now has no pain, moves easily, very little swelling, and increase of another seven pounds in weight. Case 7 returned to the hospital; all sinuses are healed except the submaxillary, from which a sequestrum of the lower jaw was removed recently; has increased in weight since second course of injections. Case 8—Left hospital for Workhouse Infirmary in same condition (no definite improvement). Case 9—After second course of injections was put in plaster and sent out on crutches. Case 10—Was put in plaster and sent out on crutches, but has not returned to hospital since for second course. Case 11—Not much change after second course except a further gain in weight. Case 12—Dead. Case

13—Second course caused further improvement. Case 14—Has not returned. Case 15—Except for some loss in weight, not much change after second course of injections.

Cresote Compound—An active intestinal antiseptic and digestant, and a powerful stimulant to intestinal peristalsis. In fermentative conditions, and to offset the manifestations of intestinal indigestion, and consequently fecal absorption, it gives excellent results. Abbott Alkaloidal Co., Chicago, Ill.

New Hunchback Treatment.—A special to the New York Times from Baltimore, Md., dated Aug. 11, says: Physicians of the Johns Hopkins Hospital are planning a series of interesting experiments for perfecting a new treatment for Potts disease, commonly known as "hunchback," entirely eliminating the old mechanical devices. Grafting of bone will form a conspicuous part. For many years, it is admitted, much success has been obtained in the old way, although there has always been desired a treatment which will relieve pressure. The new treatment is said to do this. The operation will be performed in a similar manner to that for stiffening of the knee joint, as was done recently by mortising the knee plate in one of the tendons of the leg into the joint after the tough and fibrous tissue surrounding the bone had been removed, thus generating the necessary bony tissue. The fibrous tissues, as removed, were preserved and returned to the upper and lower joints, where a continuous bone was produced, thus obliterating the joints. It is on this theory that the new method of treating Potts disease is based.

How miraculous is newspaper medicine and surgery!

Calpiac—A first-class eliminant and liver stimulant. Does the work in auto-toxic cases in which the disease symptoms are caused by retention of waste products; and in Bright's disease, etc., where watery bowel movements are required, and active stimulation of the liver. Good basic medication in many chronic and undiagnosable conditions. Abbott Alkaloidal Co., Chicago, Ill.

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THE DIAGNOSIS AND TREATMENT OF PAPILLOMATA OF THE BLADDER.

O. S. FOWLER, M.D.,
Denver, Colo.

Difficulties of the bladder, as well as of the rest of the urinary tract, have taken on a new degree of importance in recent years owing to the development and perfection of the cystoscope and with its more general adoption; not least among the new methods made possible by the cystoscope is the accurate diagnosis of new bladder growths and the treatment of some of them. Important and interesting as these all are, we will confine our remarks tonight to papillomata.

Etiology:—We know no more definitely at the present time of the etiology of these growths than we do of any neoplasm of other parts of the body. The growth appears upon the mucous membrane of the bladder, more often in the region of the trigone or within an inch or so of its borders. They appear more often during early middle life, but are found in patients above fifty or sixty years old. However, these latter ones are often manifestations of carcinomata, having the appearance of multiple papillomata on their surface as they involve the bladder wall, especially around their borders.

They are classified as benign and malignant, and it is believed that the malignant type may be primary or implanted upon the benign ones, and in order to utilize a specimen for diagnosis it must be taken from the base of the growth, for it may be only here that the tumor shows its real character. The benign type may be malignant from the patient's standpoint, for it will kill

finally, by filling up the bladder or by pressure upon the ureters, on account of its proximity to the mouths of the ureters, damming back the urine; its occurrence in the bladder may be secondary to a primary growth in the kidney pelvis. The tumor may be single or multiple, involving the whole of the mucous membrane of the bladder. It may extend by contiguity, continuity or by implantation of its cells. It may be implanted in the body wall at time of operation, and this becomes one of the operative risks, it having occurred three times; or seven percent, in forty-two cases in the Mayo reports.

It may be a pedunculated growth or its base may be sessile, or it may seem to involve every portion of the bladder wall as a sort of a velvety growth. Any one of these types may extend to such proportions as to fill the entire organ. The pedicled type usually grows less rapidly than the others.

The appearance of these tumors as they are seen through the cystoscope is interesting and sometimes even beautiful, if such a thing could be so called. The small pedunculated ones appear not unlike a strawberry or mulberry as seen in the water medium. In the larger growths the long fimbriae float out not unlike some of the delicate water plants. In these long tendrils I have been able to make out efferent and afferent blood vessels, giving these the appearance of the beautiful stalactites or stalagmites of underground caverns when lighted artificially. When they

*Read before the County Medical Society, Denver, Colorado, May 21, 1912.

are removed they collapse immediately and look now more like a soft jelly fish out of water. They are supplied with a connective tissue stroma, which acts as a frame-work.

Symptoms:—One of the earliest symptoms to call the patient's attention to this condition is hematuria, which is usually painless in the majority of cases, but is certainly not necessarily so. Whether it is painless or not depends upon its size and location in reference to the internal opening of the urethra and to the mouths of the ureters. In fact, the first pain may not be referred to the bladder at all, but to the kidney instead, from the pressure upon the mouth of the ureter. With the passing of the blood with the urine, there is often a portion of the tumor passed, which may look not unlike a large mucus shred or a small cyst. The bleeding is due to a portion of the tumor sloughing off or to a portion of it being torn off, especially if it drops down into the internal meatus. If the condition is secondary to papilloma of the kidney, then it will be preceded by pain and symptoms of ureteral obstruction. The passing of blood and urine in small, or especially in large amounts, is a symptom always of a serious condition, somewhere in the urinary tract, and should never be overlooked or its importance minimized, for it points practically to ulceration, tuberculosis, stone or new growths, and these are all of sufficient seriousness to warrant a thorough examination at once by a competent cystoscopist. It sometimes happens that it is impossible for the patient to pass the urine without assuming the knee-chest position, due to a portion of the tumor getting into the internal meatus. The blood may clot within the bladder, and it may be necessary to remove it by lavage. A patient who has suffered with this condition for a long time may be anemic from the loss of blood, which may be so great as to kill him or to cause his death

through some concurrent minor infection.

Differential Diagnosis:—(1) Severe cystitis due to ordinary pus organisms; In this condition the blood is not so profuse, more continuous and more painful, accompanied by pus, frequency of micturition and tenesmus, perhaps accompanies acute gonorrhea.

(2) Tuberculosis of the Bladder: Here the blood is seldomly found in large quantities, is more continuous, more pain, and frequency of urination, presence of pus, and the tubercle bacilli may be demonstrated.

(3) Stone of the Urinary Bladder: Small quantities of blood which is continuous, perhaps severe pain upon urination, especially at the end of the act; pain or discomfort upon running or rough riding of any sort.

(4) Essential Hematuria: This is a misnomer. Means about the same as idiopathic disease, but undoubtedly has a definite basis as its cause, which if diagnosed, would put it in the category of some well known kidney lesion. In all these conditions with which it may be confounded clinically, differentiation will be easily established with recourse to proper cystoscopic procedures. In fact, the diagnosis of them all can only be established, beyond question, with the cystoscope; you may, however, have to use some preliminary treatment to prepare the bladder for such an examination.

New growths of the kidney and any condition which may give blood can only be diagnosed by ureteral catheterization and perhaps radiographic procedures.

Treatment:—There is absolutely no palliative treatment for papilloma of the bladder. The diagnosis should be made at once, and a decision immediately reached as to what procedure is advisable. There are two methods of treating these tumors at the present time: first, surgical, and second, the recently developed method of treatment with

a high frequency current called fulguration, which destroys the growth by a process very similar to electrolysis. It seems also to have a cauterizing effect.

First, the Surgical Treatment: This of course, has been the method used for many years with certainly not gratifying success. The route of attack has been suprapubically, either preperitoneally or transperitoneally, which latter method admits of a much better operative field and does not increase the risks of the operation. When the bladder is opened and the tumor is located, as previously determined by the cystoscope, the tumor is then handled with extreme care to prevent crushing it to pieces. If it is of the pedicled type it will be perhaps comparatively easy to remove an elliptical area of the mucous membrane at its base, which includes the muscle layers also. If it is of sessile type, then it is advisable to resect a sufficiently large area of the bladder wall to get well clear of its origin. It may, however, be impossible or inadvisable to resect so much of the wall, in which case the whole must be completely and thoroughly cauterized with the actual cautery. If the papilloma involves all or practically all of the bladder wall and the bladder is filled with the tumor mass, then about all that you can do will be to scrape it out and cauterize the entire surface, which is a very unsatisfactory and usually inefficient procedure. The prognosis of these tumors following operation is indeed a hard question. It is usually considered that the pedicled ones are more favorable for a complete cure; but this is by no means a reasonably sure guide, for many of these apparently favorable ones do recur, both at the old site and upon new areas on the mucous membrane, or in the scar of the incision. It is not possible, however, to say that these are really caused by the old growth or whether they are simply produced by the same etiology that produced the original growth. The chance of recurrence of all operative cases is

placed as high as 30 to 55 per cent. The chance of metastasis to other organs is comparatively small, and it is a question in these cases whether or not the growth was not originally carcinoma from its very beginning. The chance of transplantation of the tumor upon the peritoneum or into the wound of the body wall is as stated above, nearly 10 per cent, and this with the most extreme care in protecting these parts during operation. Thus, while we feel that the procedure is the best that we have had at hand in years past, we cannot feel very much gratified when we can only offer the hope of curing approximately fifty per cent of all cases that present themselves for treatment. So many have been the disappointments of the operative method, that a new and recent procedure has been proposed in the treatment of these tumors—a so-called fulguration, introduced into this field of surgery by Dr. Edward Beers of New York City, about three years ago. To date about 100 cases have been treated, with a successful result in from three years to six months afterwards in about 75 per cent of the cases; and when the method becomes more familiar to the men using it, I feel that we are justified in expecting even more of it. The process consists of applying the high frequency Oudin unipolar current. It is carried into the bladder through a cystoscope with an insulated single or multiple wire, the end of which is plunged into the tumor mass, and the current which has been previously adjusted to a short fat spark which has a high voltage and a low amperage. This destroys the tumor in apparently three ways; first, by immediately breaking it up and throwing off the small particles of debris by the production of bubbles of hydrogen gas. The second immediate effect is that of apparent cauterization. The third effect is that during the following week or ten days the tumor contracts, or more properly the area near the site of the treatment. The technic

of the procedure is comparatively easy if the tumor is in the region of the ureters, but it becomes quite difficult for the operator and painful and uncomfortable to the patient if the growth is on the anterior or superior portions of the bladder. The heat at the end of the wire melts away the rubber in-



Fig. I. Case 4. Mr. S.:—Shows the border of a large sessile papilloma; the blood vessels of the bladder wall and of the villi of the tumor may be seen distinctly. This is the case in which the many "diagnoses" had been made. The cystoscopic picture certainly leaves nothing more to be said about diagnosis.

sulation and fuses the tumor substance to the end of the wire, so that it may be necessary to withdraw the wire and cut off the end perhaps several times in a sitting. There is no pain connected with the process while you are treating the tumor mass, but there is considerable discomfort when you get down to the mucous membrane of its base. The treatment can be repeated in about a week or ten days. By that time the cauterized area will have sloughed off, or at least have become demarcated. A tumor the size of an English walnut can be destroyed in one or two treatments, that is, down to its base; while tumors of immense size will require a longer period. If the tumor covers a large area of the bladder, the treat-

ment can be applied as often as is agreeable to the patient, and may be repeated within three to ten days, depending upon portion under treatment and the amount of discomfort to the patient. The process carries with it practically no danger and little if any inconvenience to the patient, he being able to go on about his work as a rule. It is a procedure which should receive universal recognition, at once to be used on all recurrences following operation, for these are usually multiple and do not as a rule admit of a second operation. This point I think will be conceded by all, and the men who have used it feel that it is quite possible that it will replace all other operative procedures, in whatever stage of the disease. Whether it will do this remains to be seen in the next few years of its use. The method is one only for the expert cystoscopist, because the treatment must be done as rapidly and skillfully as possible, else the patient will give up the procedure as too trying and wearisome.

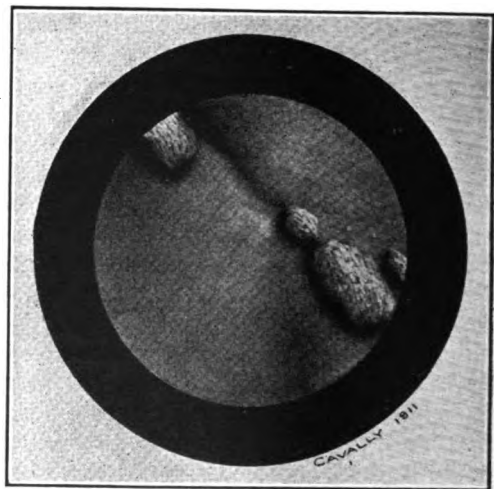


Fig. II. Case 5. Mrs. H.:—Shows the recurrence within three months after operative removal of original tumor. There were more in other parts of the bladder. The scar can be distinctly seen with small tumors at each end of it, and others can be seen appearing in a new site of the mucous membrane.

Case 1. Mrs. B., housewife, age 55, referred by Drs. Bagot and P. V. Carlin; intermittent painless hematuria for several months. Cystoscopic examination—pedunculated papilloma, size of

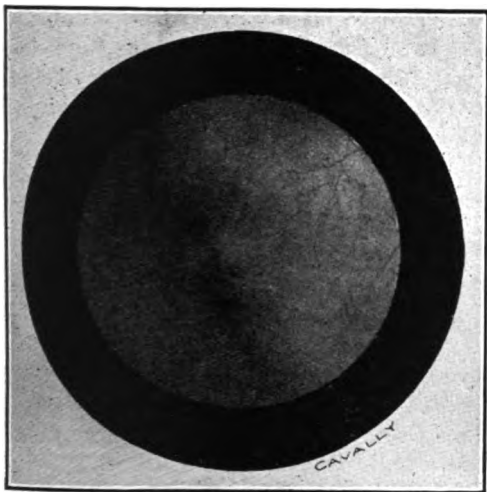


Fig. III. Also case 5 at later date:—Shows the lower end of Fig. II, the original recurring tumors have been destroyed by fulguration and have entirely healed, and two, more recent ones, have been treated one week previously and are in process of healing, and still four more very small ones have appeared since the last treatment. I have been able at several times to have this bladder entirely clear, only to find later that more had shown up, in both new and old regions. With such a patient it is a constant fight for her life and you should not be discouraged, for it is quite reasonable to hope and expect that earlier or later you may succeed with it.

a small English walnut, an inch and a half from the right ureter and slightly posterior to it. A portion of the wall was removed with the tumor by Dr. Bagot; uneventful recovery and well to the present time three years later.

Case 2. Miss W., referred by Drs. Bagot and P. V. Carlin; more or less constant hematuria of late with pain and frequency of urination; patient has pulmonary tuberculosis.

Cystoscopic examination—tuberculous ulceration in trigone region with papillomatous area to the right and posterior to the right ureteral opening. Patient in too weak and emaciated con-

dition to admit of any operative procedure. Died a few weeks later. Case is interesting from the fact that it showed two different lesions at this time.

Case 3. Referred by Dr. Stephen Parsons; farmer, aged 65. Painful hematuria for several weeks previous. Cystoscopic examination showed a carcinomatous area in whole floor of bladder, with what, if seen alone, would appear to be a papillomatous area at its posterior margin. Diagnosis, carcinoma of the prostate, reported here on account of the peculiar area which appeared as a papilloma.

Case 4. Mr. S., referred by Dr. Greedy; clerk, aged 23. Eighteen months previously had sudden painful hematuria, and has had similar attacks since at intervals of about two months. In the meantime has consulted thirteen doctors and these various diagnoses have been made: gonorrhea, masturbation, stone in the bladder, tuberculosis of the bladder, stone and tuberculosis of the kidney, appendicitis, hernia into the bladder. One surgeon referred him to a genito-urinary surgeon, who diagnosed a papilloma, which, for some reason, was not received seriously, and some osteopaths had added their diagnosis as a "slipped vertebra" which, by the way, was as good as some of the others. Cystoscopic examination showed a very large papilloma apparently springing from the left of the bladder; right ureter could be seen, the left could not. Operated by Dr. Greedy and myself by the transperitoneal route; removed a large sessile papilloma, cauterized the base deeply. Recovery uneventful, and the last examination, eighteen months later, showed no evidence of recurrence.

Case 5. Mrs. H., seen with Dr. Freeman, housewife, aged 28. Intermittent painless hematuria for about two months. Cystoscopic examination revealed pedunculated papilloma one inch laterally to the right and external to the right ureter; was operated by Dr. Freeman in January, 1911, by re-

moving an elliptical area of the entire bladder wall with it; seemed a very favorable case for operative success, but the symptoms recurred within three months. Cystoscopic examination showed small papillomata in the site of the old scar, in the site of the suprapubic incision and in a new portion of the membrane about half way between these two. Was extremely unfavorable for further operative treatment, so he

asked me to undertake the treatment by fulguration, which I started very soon afterwards. See Figs. II. and III.

Case 6. Man, aged about 65, seen with Dr. Shere; hematuria, painless for a few months. Cystoscopic examination showed small papillomata above and behind each ureteral opening; advised fulguration, which I believe has been carried out, but have not understood with what success.

TUMORS OF THE BRAIN WITH REPORT OF CASE*

L. E. RUPERT, M.D.,

Florence, Colo.

W. R. S., male, age 54, carpenter. Family history negative; patient of rather dull, apathetic look; stout, well built; weight about 170 pounds. Always healthy, except a chronic nasal catarrh of years' standing, and occasional headache of a day or more, supposedly from deranged digestion. Last two or three years the headache has been severe at times, location above right eye like migraine, and running back on right side of head mostly. The pain was not constant, and was thought to be just an ordinary headache. Has been at work all the time. I saw him first in January of this year. He said he had gotten wet and was aching all over. Headache general. He had no fever, but coated tongue, very foul breath, constipated bowels. He was much better the next day and soon felt his usual self. This lasted for two weeks, until January 31, I was called to see him at noon. He complained of severe pain over right frontal sinus and running more over right side of head and to back of neck; temperature, 98 degrees; pulse, 72. The pain continued, more or less, till the third of February. The pains were quite severe, with some discharge of pus from right nostril, and tenderness over right frontal sinus, running to right temporal region. Dr. Orendorff saw him on the 4th, and de-

cided there must be infection of the frontal sinus and defective drainage. The doctor advised hot applications and alkaline nasal douches, which gave much relief, and at times he was free from pain, especially as long as the discharge from the nose was free. The 7th, 6 p. m., temperature 98.6 degrees, pulse 80. The 9th the pain was more severe, and he was taken to Dr. Graves' hospital, and Dr. Orendorff operated the 11th. Opened the right frontal sinus; the bone was very thick; pus was found in the lower part of the sinus and in the ethmoidal sinus. Good drainage was made through the nose. He stood the operation quite well, Dr. Maxwell giving the anesthetic. This was at 11 a. m. Things went very well till that night, he went bad, Cheyne Stokes respiration. Dr. Graves, being close, administered stimulants and performed artificial respiration.

I neglected to say that there was some paralysis of the right side of face when he went to the hospital. Dr. Orendorff can best tell you how he got along during his stay in the hospital. I understood he got along very nicely, though delirious at times, and imagined that he was some place else. The wound healed nicely. He returned home in ten days, and seemed much benefitted from the operation; the facial paralysis

*Read before the Fremont County Medical Society.

cleared up quite a bit. Four days after coming home he had severe pains in the head, and vomited some; at 4 p. m., February 25, temperature 98 degrees, pulse 86. On March 3rd had gotten along nicely, was free from pain quite a bit of the time, especially when the discharge was free from the nose; but becoming more childish, did not want to be left alone, his feelings were easily hurt and would cry often. Some tremor of the left arm was noticed, his gait not quite so steady. Reflexes were but little disturbed, left patella diminished, pupils responded to light rather sluggishly. On the 9th was quite out of his mind during the night, feared some one was going to harm his wife, though this forenoon was rational, talked about his business, though his mind seemed dull and his thoughts would not flow freely. The 12th, nose discharging pus and his mind clear, walking around in the house. The 15th, became unconscious during the night. The face is drawn to the right side, ptosis of both eyelids; the pupils respond to light fairly well; respiration intermittent. Partial paralysis of the left arm. The 16th, but little change in the last 24 hours; Cheyne-Stokes respiration well marked. On the 17th, he was seen by Drs. Orendorff, Little and Davis. Paralysis of the left side complete. Right knee jerk diminished. Pupils respond sluggishly to light. Abscess of brain suspected. This condition continued along about the same, both pulse and respiration very slow and intermittent. He lay perfectly quiet in bed, could not turn over, did not recognize those around him, sweating profusely, and passed away in this unconscious condition on the 19th.

Autopsy revealed a large gummatous tumor mass adherent to the dura mater, much of it broken down, situated in the right frontal and parieto-temporal lobes, involving much of the posterior part of the frontal lobe, centering around the junction of the inferior ascending and ascending parietal con-

volutions, extending down into the brain substance about one and a quarter or one and a half inches. Two blood clots were found, coming from the branches of the anterior cerebral and middle cerebral arteries.

Butler says: "The commonest forms of brain tumors are the sarcomatous type, tubercle, gumma, and infectious granulomata, and occur at all ages up to 50, one-third under the age of 20."

Hare says: "By far the most common is tubercle, then gumma, glioma and sarcoma; cancer, fibroma, osteoma, neuroma and vascular tumors also rarely." Tumors are most common in males (2 to 1), and they do not know why. Gowers has shown that after six months of life to old age, all ages suffers about equally. Most of the growths in childhood are tubercular; indeed they form 53 per cent of all growths at all ages, if gumma be excluded.

The general symptoms are, according to Butler, persistent headache with marked exacerbations; vomiting, convulsions, general or local; paraesthesias, vertigo, impaired eye sight and perhaps mental dullness or slowness. Weakness and emaciation follow the vomiting, and intense pain. Paralysis and blindness ensue, convulsions occur more frequently, the patient become bedridden, and dies after from one to five years of exhaustion.

Landon Carter Gray: "A brain tumor may cause either a general headache or pain in one distribution of a nerve, and be so slight as to picture well a neuralgia. Thus in one patient who died in the course of six weeks with a tumor of the centrum ovale as big as a medium size potato, the symptoms at the onset were entirely of those of slight neuralgic pain over the forehead; whilst in another case of cerebral tumor, the patient in six months died with a melanosisarcoma as big as a hen's egg imbedded in the temporo-sphenoidal lobe. The only symptom for the first four weeks had been that of neuralgia limited to the supraorbital branch

of the fifth pair on the same side as the tumor; and in still another case, of a patient with a tumor of the cerebellum, the first symptom had been recurring attacks of obstinate neuralgia of the vertex. The diagnosis, however, can usually be made by careful study of the case. A neuralgia should always excite suspicion when it appears gradually or suddenly in a patient who has not been subject to it, with some slight motor or sensory symptoms of other nerves; with some mental alteration perhaps; with attacks of nausea and vomiting; or subsequently to the appearance of tumors in other parts of the body. If an optic neuritis occurs, or any slight changes in the optic disk, the diagnosis is still more easily made; but unfortunately in many cases of tumor optic neuritis is either a late symptom or does not occur at all. The development of a case of brain tumor, with its pronounced motor and sensory paralysis and mental symptoms, will inevitably make clear a diagnosis that may have been obscure at the start."

Intracranial syphilis in many of its forms is very frequently mistaken for simple neuralgia, but the diagnosis can be made in many instances by the three symptoms which he had discovered, viz., the quasi-periodical headache, either nocturnal or at some stated time of the day, and the obstinate insomnia, the headache and insomnia disappearing upon the supervention of any convulsive or paralytic symptoms. But it is in the early stage of the headache, when it is only accompanied by obstinate insomnia, and before the supervention of convulsion or paralysis, that the diagnosis must be made. In such conditions careful search should be made for other evidence of syphilis. And should the case not yield to the ordinary treatment, a Wassermann test should be made or the iodides given a trial.

Osler: (1) General: The following are the most important: Headache, either dull, aching and continuous, or

sharp, stabbing and paroxysmal. It may be diffused over the entire head; sometimes it is limited to the front or back. When in the back of the head it may extend down the back of the neck (especially in tumors in the posterior fossa), and when in the front it may be accompanied with neuralgic pains in the face. Occasionally the pain may be localized and associated with tenderness on pressure.

Optic neuritis occurs in four-fifths of all the cases (Gowers). It should be looked for in every case presenting cerebral symptoms, for it may be present in high degree without impairment of vision. Alfred Saenger claims that the choked disk is an edema, propagated from the brain, penetrating into the optic nerve and optic disk.

Vomiting is a common feature, and with headache and optic neuritis makes up the characteristic clinical picture of cerebral tumor. An important point is the absence of definite relation to meals, and is independent of any gastric disturbance.

Giddiness is often an early symptom. The patient complains of vertigo on rising suddenly or turning quickly. Mental Disturbance: The patient may act in an odd unnatural manner, or there may be stupor and heaviness. The patient may become emotional or silly, or symptoms resembling hysteria may develop. Convulsions, either general or localized in character. There may be slowing of the pulse, as in all cases of intracranial pressure.

Localizing Symptoms: Focal symptoms often occur, but it must not be forgotten that these may be indirectly produced. The smaller the tumor and the less marked the general symptoms of cerebral compression, the more likely is it that any focal symptoms occurring are of direct origin.

Central motor area: The symptoms are either irritative or destructive in character. Irritation in the lower third may produce spasm in the muscles of the face, in the angle of the mouth, or

in the tongue. The spasm with tingling may be limited to one muscle group before extending to others; this Seguin terms the signal symptom. The middle third of the motor area contains the arm center, and here, too, the spasm may begin in the fingers, in the thumb, in the muscles of the wrist, or in the shoulder. In the upper third of the motor areas the irritation may produce spasm, beginning in the toes, in the ankles, or in the muscles of the leg. In many instances the patient can determine accurately the point of origin of the spasm, and there are important sensory disturbances, such as numbness and tingling, which may be felt at the region affected.

In all cases it is important to determine, first, the point of origin, the signal symptom; second, the order or march of the spasm; and third, the subsequent condition of the part first affected, whether it is a state of paresis or anesthesia.

A destructive lesion in the motor zone causes paralysis, which is often preceded by local convulsive seizures; there may be a monoplegia, as of the leg, and convulsive seizures in the arm, often due to irritation in these centers. Tumors in the neighborhood of the motor area may cause localized spasms and subsequently, as the centers are invaded by the growth, paralysis occur. On the left side, growths in the third frontal or Broca's convolution may cause motor aphasia.

(b) Prefrontal region: Neither motor nor sensory disturbance may be present. The general symptoms are well marked. The most striking feature of growths in this region is mental torpor and gradual imbecility. Particularly when the left side is involved, mental characteristics may be greatly altered. In its extension downward the tumor may involve on the left side the lower frontal convolutions and produce aphasia, or in its progress backward cause irritative or destructive lesions of the motor area. Exophthal-

mos on the side of the tumor may occur and be helpful in diagnosis, as in the case reported by Thomas and Keene.

(c) Tumors in the parieto-occipital lobe may grow to a large size without causing any symptoms. There may be word-blindness and mind-blindness when the angular gyrus and its underlying white matter are involved, and paraphasia. Astereognosis may accompany growth in the superior parietal region.

(d) Tumors of the occipital lobe produce hemianopsia, and a bilateral lesion may produce blindness. Tumors of this region on the left hemisphere may be associated with word blindness and mind-blindness.

(e) Tumors in the temporal lobe may attain a large size without producing symptoms. In their growth they may involve the lower motor centers. On the left side involvement of the first gyrus and the transverse temporal gyri (auditory sense area) may be associated with word-deafness.

(f) Tumors growing in the neighborhood of the basal ganglion produce hemiplegia from involvement of the internal capsule. Limited growths in either the nucleus caudatus or the nucleus lentiformis of the corpus striatum do not necessarily cause paralysis. Tumors in the thalamus opticus may also, when small, cause no symptoms, but increasing they may involve the fibers of the sensory portion of the internal capsule, producing hemianopsia and sometimes hemianaesthesia.

Growths in this situation are apt to cause early optic neuritis, and, growing into the third ventricle, may cause a distention of the lateral ventricles. In fact, pressure symptoms from this cause and paralysis due to involvement of the internal capsule are the chief symptoms of the tumor in and about these ganglia. If the ventrolateral group of nuclei in the thalamus be involved, there may be unilateral distur-

bances of cutaneous and muscular sense, hemichorea, or movement ataxia.

Growths in the corpora quadrigemina are rarely limited, but commonly involve the crura cerebri as well. Ocular symptoms are marked. The pupil reflex is lost and there is nystagmus. In the gradual growth the third nerve is involved as it passes through the crus, in which case there will be oculo-motor paralysis on one side and hemiplegia on the other, a combination almost characteristic of unilateral disease of the crus.

(g) Tumors of the pons and medulla: The symptoms are those of pressure upon the nerves emerging in this region. In disease of the pons the nerves may be involved alone or with the pyramidal tract. Of 52 cases analyzed by Mary Jacobi, there were 13 in which the cerebral nerves were involved alone, 13 in which the limbs were affected, and 26 in which there was hemiplegia and involvement of the nerves; 22 of the latter had what is known as alternate paralysis—i. e., involvement of the nerves on one side and the limbs on the opposite side. In four cases there were no motor symptoms. In tuberculosis (or syphilis) a growth at the inferior and inner aspect of the crus may cause paralysis of the third nerve on one side, and of the face, tongue and limbs on the opposite side (syndrome of Weber). A tumor growing in the lower part of the pons usually involves the sixth nerve, producing facial paralysis, and the auditory nerve, causing deafness. Conjugate deviation of the eyes to the side opposite that on which there is facial paralysis, also occurs. When the motor cerebral nerves are involved the paralyzes are of the peripheral type (lower segment paralysis).

Tumors of the cerebral nerves cause in some instances, a combination hemiplegia with paralysis of the nerves. Paralysis of the nerves are helpful in topical diagnosis, but the fact must not be overlooked that one or more of the cerebral nerves may be paralyzed as a result of a much increased general intracranial pressure; signs of irritation in the ninth, tenth and eleventh nerves are usually present, and produce difficulty in swallowing, irregular action of the heart, irregular respiration, vomiting, and sometimes retraction of the head and neck. The hypoglossal nerve is least often affected. The gait may be unsteady or, if there is pressure in the cerebellum, ataxic. Occasionally there are sensory symptoms, numbness and tingling. Toward the end convulsions may occur.

Tumors of the pituitary body are not uncommon, and are usually of the nature of fibroma or myxoma. They may accompany acromegaly.

Diagnosis: From the general symptoms alone the existence of tumor may be determined, for the combination of headache, optic neuritis and vomiting is distinctive. A gradual increase in the intensity of the symptoms is usually seen. It must not be forgotten that severe headaches and neuroretinitis may be caused by Bright's disease. The localization must be gathered from the consideration of the symptoms above detailed, and the special symptoms, the different locations gives. Mistakes are most likely to occur in connection with uremia, hysteria, and general paralysis, but careful consideration of all the circumstances of the case usually enables the doctor to avoid error. Auscultatory percussion is occasionally of service in localization.

AN OUTLINE OF PARAPLEGIA, DIPLEGIA, QUADRIPLÉGIA AND MONOPLÉGIA.

Peripheral Neuron (Spinal Paralysis): **Flaccid** or spastic loss of power below lesion; **reflexes** diminished or **lost** below lesion (ultimate exaggeration of reflexes if lesion above lumbar enlargement); **reaction of degeneration** in five days or more; **sphincteric disturbances**; often priapism; **early decided atrophy and prominent trophic changes** (bed sores, cyanosis, coldness); contractures later; onset of paralysis usually gradual, with numbness, hyperesthesia, flexor spasms of lower limbs and impaired gait; usually complete, permanent anesthesia in paralyzed parts up to certain level on trunk; intellection and special senses unimpaired.

Central Neuron (Cerebral Paralysis): **Spastic** paralysis; reflexes increased; contractures; brain symptoms.

General Inflammations of Cord: Paralysis of both legs and arms; loss of control of bladder and rectum; bed-sores; reflexes may be increased for a time—diminished and lost later.

Localization.

Flaccid.

Sacral Lesions: Small muscles of feet, with loss of sensation on outer side of feet and toes and of skin about anus.

Lumbar Lesions: Both legs and pelvis; paralyzed bladder and lost reflexes.

Transverse Cervical Lesion: Both arms and both legs; slow pulse, altered pupils.

Lesion of Medulla (Bulbar Paralysis): Both arms and both legs, lips, tongue, palate, pharynx; sensation increased on affected side—diminished or lost on other.

Bilateral Lesions of Brain: Growth near vertex, pressing on both paracentral lobules; lesion of both crura (paralysis of third and fourth nerve on either side; may be hemianopsia); lesion of

pons (with paralysis of seventh, 6th or motor branch of fifth, or facial anesthesia; often dysphagia, difficult articulation or hyperpyrexia).

Spastic.

Transverse Cervical and Dorsal Lesions: Both legs, abdomen and sphincters; spastic contraction of leg muscles; dyspnea and dysphagia.

Lesions of Anterior Lateral Columns: Both legs paralyzed as to motion but not sensation; increased reflexes.

Embolism of Abdominal Aorta: Sudden, very severe pains in both legs, and complete motor and sensory paraplegia; disappearance of pulsation in femorals; livid skin.

General Treatment of Paraplegia: In initial period, active treatment for convulsions; cold to head, bromids by mouth and mercurials to free purgation—use every effort to prevent recurrence of attacks, employing chloroform if need be; prompt trephining if cerebral palsy due to trauma; when condition established try olive oil rubbings, massage and passive movements, and apply slowly interrupted current to extensor muscles of arm and forearm, to back of thigh and front of leg.—Dana.

Diplegia of Infants: Usually from difficult labor or injury at birth (bilateral meningeal hemorrhage or cortical thrombosis); noticed shortly after birth, sometimes with fever or convulsions; rigid paresis of all the limbs, most marked in legs (adducted, extended, often crossed at knees); talipes equinus or equinovarus; choreiform movements and athetosis—associated movements of hands; marked mental impairment or epilepsy.

Sudden Paraplegia from spinal or cranial injury, displacement due to caries, embolism of abdominal aorta, spinal hemorrhage, softening of cord,

*An outline of Hemiplegia appeared in our September, 1909, issue.

acute ascending paralysis, certain poisons, sexual excesses, violent exertion and fatigue and exposure to cold or wet.

Gradual Paraplegia includes all other forms; general ingravescent paralysis from hemorrhage into one lateral ventricle escaping into other.

Pseudoparaplegia (passes away with removal of cause) in scorbutic and rickety children (knee-jerks present) and after diphtheria (ataxia), or from reflex irritation from stomach, kidneys or genitals; also from fatigue, exposure, tetany or hip- or knee-joint disease.

"Pseudobulbar Paralysis" (double hemiplegia with involvement of face and normal bulbar reflexes) from chronic sclerotic processes in both hemispheres.

Special Causes of Paraplegia.

Flaccid.

Spinal Hemorrhage: Sudden, incomplete, with violent pains in back; spasms of legs in meningeal; bladder and rectal disorders; more or less sensory loss.

Treatment: Absolute rest in prone position; ice over spine at seat of hemorrhage; keep bowels freely open; full doses of ergot or ergotin (3 gr. hypodermically every two hours for two or three doses); after-treatment same as for myelitis.—Gowers.

Spinal Injury with Total Destruction of Cord: Total symmetric paralysis below lesion; unable to move feet and ankles in sacral lesions; unable to lift feet or straighten legs in lesions of lower half of lumbar enlargement; cannot move thighs, legs or feet in lesions of entire lumbar enlargement; legs paralyzed and somewhat rigid (unless complete destruction of cord) in dorsal lesions; main en griffe in lesions at 1 D. and 8 C.—elbows and shoulders freely moved; forearms lie on body with hands pronated and wrists paralyzed in 7 C.; arms abducted from side, forearms supinated and wrists and fingers paralyzed in 6 C.; arms extended and

relaxed at side of body and all motion impossible in lesion at 5 C.

Acute Central Myelitis: Fever; lost sensation; sphincter paralysis; girdle pain at upper level of lesion.

Treatment: Scrupulous cleanliness; guard against bedsores and cystitis; cupping of spine; Chapman's ice-bag; quinin and arsenic in later stages; massage beneficial when muscles have wasted.—Osler.

Acute Dorsal or Lumbar Transverse Myelitis: Girdle sensation or tingling in legs (arms if cervical); early bedsores.

Treatment: See just above.

Acute Anterior Poliomyelitis: Young children; sudden onset with fever, vomiting and prostration; rapid wasting and coldness of affected muscles; rheumatoid pains; peronei and anterior tibial group.

Treatment: Rest in bed during acute stage, with dry cups to spine, ergot internally and flannel wrapped about affected members; after two or three weeks begin use of faradic or galvanic current, massage and strychnin (gr. 1/100 to a child of two years), gradually increased; massage and mechanical appliances to combat contractures.—A. A. Stevens.

General Spinal Paralysis: Subacute and chronic anterior poliomyelitis.

Treatment: Massage of affected limbs and use of continued current.—W. B. Hadden.

Myelitis of Infectious Diseases: Particularly influenza, typhoid, smallpox and measles.

Landry's Acute Ascending Myelitis: Paralysis spreads rapidly from feet to legs, trunk, arms and respiratory muscles; sensation not lost; prodromal febrile period; cold or convalescence.

Treatment: Warm bath or vapor bath at first (if symptoms follow exposure), followed by long, narrow mustard plaster over spine; perfect rest; sodium salicylate or ergot if from exposure; mercury and iodids for syphilitic and obscure cases; full doses of fer-

ric chlorid in traumatic septic cases.—Gowers.

Toxic, Septicemic, Diabetic or Malarial Polyn neuritis: Sensory disturbances and marked tenderness of affected peripheral nerve trunks and muscles; external popliteal and musculospiral especially.

Treatment: Remove cause if possible; rest very important; avoid worry; anodynes locally; wrap part in cotton-wool; salicylates valuable in early stage of febrile cases; strychnin, tonics, nourishing, easily digested food; quinin in malaria; mercury or iodids in syphilitic cases; massage, passive movements, warm baths, galvanization.—Anders.

Locomotor Ataxia: Late paresis; lightning pains, ataxia, Argyll Robertson pupils.

Treatment: Avoid all excesses, fatigue, falls or cold; absolute rest for a week or two at onset of treatment often beneficial; regulation of diet and aperients for indigestion and lightning pains; drugs of much service, especially arsenic (with quinin or ext. nux vomica), strychnin (combined with 1/200 gr. nitroglycerin), iron, alum chlorid (24 gr. two or three times a day), belladonna, ergot, phosphorus and mercury (1/24 gr. red iodid with 1/12 gr. sodium arsenate in pill)—best effect by alternating two or more remedies; spinal counterirritation with blisters or actual cautery when pain and tenderness; indian hemp, coal tar antipyretics, cocain or morphin for pains; regular catheterization if residual urine.—Gowers.

Spinal Muscular Atrophy: First in hands or upper arm; marked wasting; fibrillary twitchings; tendon reflexes diminished or lost.

Treatment: Keep up general health and avoid fatigue or mental strain; strychnin nitrate hypodermically, 1/100 gr. at first, rapidly increased to 1/40 gr., daily—intermit injections one week in three or four when malady apparently arrested; rubbing and massage of ser-

vice in preventing and diminishing deformities.—Gowers.

Progressive Neural Muscular Atrophy: (Peroneal Form of Charcot-Marie): Begins in childhood; slowly extends from peroneal distribution (talipes equinovarus) to muscles of calves, thighs and rest of body; a family disease.

Hysteria: Sudden, often excited by emotional shock, and may be cured by same; shifting areas of anesthesia; normal or exaggerated reflexes; no R. D.; may be retention of urine; muscular paradox; may be atypical ankle clonus.

Treatment: Treat on general principles; direct patient's attention from affected parts; occasional local blisters; galvanization and massage with daily friction and appropriate internal treatment.—Anders.

Astasia Abasia: No paraplegia while lying, but only on standing, or rarely while sitting; usually hysterical in origin.

Exophthalmic Goiter: Flaccid or rigid paralysis rarely; tachycardia, exophthalmus, goiter.

Spastic.

Compression Myelitis: Slow onset with severe pain in tumor of cord or meninges; excruciating neuralgic pain, aggravated by movement, in aneurysm, caries or cancer of vertebrae (palpable deformity).

Treatment: Morphin for pain of aneurysm or tumor; persistent rest and orthopedic support to spine with extension, or persistent suspension (with spine car or chair) for caries; fresh air, good food, cod-liver oil and arsenic for caries.—Osler.

Spinal Dislocation or Fracture Without Destruction of Cord: Total paralysis below level of lesion; retention or enuresis; for localization, see "spinal injury" under "flaccid" above.

Treatment: Concussion of Spinal Marrow: Toxicodendron, gr. v on first day of treatment, increasing daily by

same amount till 60 gr. a day are reached.—Trousseau.

Transverse Cervical Myelitis: Arms and legs, with atrophy and R. D. of arms; hyperesthesia or anesthesia.

Cerebral Diplegia or Paraplegia of Infants: Follows injury at birth or arrest of development; attendant convulsions; contractures of thigh adductors, talipes equinus or equinovarus; no R. D. and little wasting; marked mental defects.

Hereditary Paralysis: Early life; history of heredity.

Treatment: Massage and carefully selected exercises may accomplish something.—Church.

Multiple Sclerosis: Intention tremors and exaggerated reflexes; nystagmus or scanning speech.

Treatment: No remedy of any avail; rest and easily assimilated food of prime importance.—Anders.

Lateral Spinal Sclerosis: Very gradual and progressive from feet upward; markedly spastic gait; no atrophy or ataxia.

Treatment: Spastic and Ataxic Paraplegia: Arsenic, iron, quinin and strychnin (cautiously) useful; avoid fatigue; course of upward rubbing, with Turkish baths.—Gowers.

Anterolateral Sclerosis: Age 20-40; concussion or cold and wet, or primary degeneration.

Posterolateral Sclerosis: Ataxia and increased reflexes; ocular and sensory symptoms absent.

Amyotrophic Lateral Sclerosis: Arms (hand, shoulder or back) wasted and paralyzed before legs; reflexes increased at first, lost later.

Spinal Pachymeningitis: Like myelitis, but with early and severe pain; knee-jerk increased if lower extremities involved; onset gradual but rapid, with chill and fever, in acute cases.

Treatment: Absolute rest; tonics; frequent blisters or actual cautery along cord; morphin, antipyrin or phenacetin to relieve pain; potassium iodid for absorbent effect—give freely with

a mercurial in syphilitic cases.—Stevens.

Cerebrospinal Meningitis: Cerebral symptoms predominate—intense headache, fever, delirium, coma, cranial nerve symptoms; retracted head; herpes, purpura, erythema or urticaria.

Chronic Myelitis: Progresses very slowly with girdle pain, exaggerated reflexes, and numbness, tingling or burning in lower extremities, followed by loss of power and sensation.

Treatment: Belladonna ointment along spine and ergot internally.—Brown-Sequard.

Excessive Venery: Phosphorus and cod-liver oil.—Wood.

Spinal Syphilis: Rectal and vesical disorders and slight sensory disturbances; usually associated brain symptoms; nocturnal rachialgia.

Treatment: Alternation of sufficient doses of sodium iodid (6 weeks) and mercury (3 weeks) for 6 months; then a similar course every six months for five years.—Church.

Paretic Dementia: Spastic or ataxic; slow or rapid; progressive mental failure; often delusions of grandeur; contracted, unequal pupils; stumbling, slurring speech, with slight facial twitching.

Syringomyelia: Invading anterior horns—begins in hand or arm and extends to other side; dissociated sensation; trophic changes.

Tumor in Lower Pons or Medulla: Legs more affected than arms; cranial nerve symptoms like bulbar palsy.

Cerebellar Tumor: Vertigo, occipital headache and titubation, aggravated by movement.

Hysteria: Paralysis sudden, more or less transitory and shifting; power of motion returns before sensation—the opposite of organic disease; muscular paradox (greater resistance of a muscle at one time than another); contractions disappear under ether; no R. D., bedsores or sphincter palsy.

Treatment: See above under flaccid paralysis.

Spinal Hyperemia: Gradual incomplete paraplegia, worse mornings.

Treatment: Dry cupping, particularly useful when renal ischemia.

Senility: Spastic paraparesis, sometimes increasing to contracture; from arteriosclerosis of spinal vessels or small bilateral cerebral foci.

Bulbar Paralysis: Spastic diplegia with paralysis of lips, tongue, pharynx and larynx—if pyramid involved; see below under lingual paralysis.

Pseudohypertrophic Muscular Paralysis: Increasing muscular weakness and enlargement of calf, thigh and buttock; waddling, stumbling gait; patient climbs up himself in rising from floor.

Treatment: Carefully selected exercises graduated to capacity of weakened muscles promise most good.—Church.

Caisson Disease: Often with headache, giddiness, vomiting and abdominal pains.

MONOPLEGIA AND LOCAL PALSIES

General Characters.

Cortical: Incomplete physiologic (certain movements) paralysis (more or less permanent in destructive lesions); epileptiform spasms in paralyzed limb; may be coma at onset; late reaction of degeneration.

Spinal: Regional paralysis corresponding with spinal segment involved; crossed anesthesia; hyperesthesia and often excessive warmth in paralyzed limb.

Peripheral: Follows injury or neuritis; always flaccid and limited to muscles supplied by special nerve; heaviness, numbness or constant, dull pain; anesthesia, atrophy and glossy skin if paralysis complete.

Muscular: Merely diminished electric reactions; paralysis follows atrophy.

Lower Extremities.

Localization.

Unilateral Lesion of Cord: Thigh type in upper lumbar lesions; leg type in middle lumbar; foot type in sacral;

crossed anesthesia; no wasting or loss of faradic irritability.

External Plantar Paralysis: Claw-foot.

External Popliteal: Foot-drop and adduction; steppage gait; loss of sensation on outer side and dorsum of foot; from contusion, multiple neuritis or anterior poliomyelitis.

Peroneal: Toe-drop; shuffling and fumbling movements of foot.

Internal Popliteal: Pes calcaneus and loss of power in calf muscles.

Great Sciatic: All muscles below knee; short steps—toes reach ground first.

Anterior Crural: Cannot flex thigh; tendency to fall backward; early loss of knee-jerk; impaired sensation in lower two-thirds of front and inner side of thigh; from wounds, dislocated hip, tumor or fracture of pelvis.

Obturator: Lost adduction of thigh and anesthesia in upper part; reflected pain in knee joint; from instrumental labor.

Small Sciatic: Gluteus maximus; difficulty in rising from seat.

Smaller Gluteal and Tensor Fascial Paralysis: Toes point outward.

Special Causes.

Hemilateral Myelitis: Paralyzed limb hyperesthetic—opposite one anesthetic; band of anesthesia around body at level of lesion.

Anterior Poliomyelitis: Flaccid paralysis of certain muscles, causing dragging of toe or foot-drop; sudden onset in children with fever, chill, vomiting, prostration; passive sphincters, muscular atrophy, reflexes lowered or lost.

Treatment: Before Atrophy: Fluid extract of ergot, dr. 1 or 2 in 24 hours for child of one year.—A. Jacobi.

After Atrophy: R. Strych, sulph. gr. 1/90; ferri pyrophos. gr. 2/3; acidi phosphor. dil. m. v; syr. zing. m. xv; for a child of two years.—Hammond.

Pseudohypertrophic Muscular Paralysis: Children only; fatty enlargement of calves and atrophy of other

muscles, with increasing debility and lordosis.

Treatment: See above under paraplegia.

Locomotor Ataxia: Peroneal paralysis in late stages.

Toxic Neuritis: Especially alcohol, arsenic and phosphorus; foot-drop preceded by violent pains and marked paresthesia; nerves and muscles very tender in alcoholic cases:

Treatment: Remove or arrest cause if possible; in acute onset of alcoholic use citrate of potash, nitrous ether and comp. tinct. cinchona, with a little digitalis if pulse feeble; in toxemic septicemic forms, tinct. chlorid of iron, 20-30 m. three or four times a day; after acute stage give iron, quinin or small doses of strychnin; cod-liver oil useful in later stages; anodynes for pain; daily application of voltaic electricity to paralyzed muscles, using large sponge-holders and moderate current; wrap tender limbs in cotton-wool; upward massage with extension in later stages; slight sensory loss sometimes lessened by faradic wire brush.

Traumatic or Pressure Neuritis: Wounds, falls, contusions; follows accident to peroneal nerve most frequently; also from vertebral caries, pelvic inflammation or tumors.

Treatment: For acute cases, absolute rest and elevation of part, ice-bags, local abstraction of blood, morphin and atropin hypodermically over painful nerve, and application of primary galvanic current, diaphoretics and laxatives; for chronic inflammation, blisters, electricity and increasing doses of potassium iodid; for atrophy of muscles use massage, electricity, douches and hypodermic injections of strychnin.—Roberts.

Inflammatory Enlargement of Prostate: Hemiparesis in elderly men; dragging foot in walking, scraping the pavement.

Hysteria: Sudden (or from joint to joint) monoplegia following slight injury or emotion; irregular anesthesia

and other stigmata; susceptible to suggestion.

Spinal Meningitis: Much pain on movement, but not on pressure of nerves and muscles.

Hydrocephalus: Paralysis of one or more extremities; enlarged head; strabismus.

Cerebral Softening: Constant headache; early mental failure.

Cerebral Abscess: Severe, constant, localized headache.

Paretic Dementia: Stupid grandiose delusions; late paresis.

Treatment: Large doses of potassium iodid in cases following syphilis; careful nursing and orderly life of asylum; bromids for sleeplessness and epileptiform seizures.—Osler.

Upper Extremities.

Localization.

Lesion of Arm and Hand Center in Cortex: One arm and same side of face; may spread to trunk and leg; coma, convulsions; aphasia if palsy right-sided; sensation unimpaired.

Lesion of Brachial Plexus or Branches: Abduction and elevation of arm most affected; heaviness, sleepiness or numbness of arm; arm flaccid, wasted, cold and blue in complete paralysis; atrophy of thumb and hand, anesthesia of inner side of arm and myosis and sluggish pupil on affected side in paralysis of lower roots of brachial plexus; from blows or falls or carrying heavy weights on shoulder, sleeping on arm, fracture, dislocation, crutches (bilateral), pressure by cervical or axillary growths, or gouty, traumatic, septic or toxic brachial neuritis (constant pain made worse by movement; local heat and tenderness).

Treatment: Remove as far as possible neuritic or traumatic cause; get rid of any source of pressure; suture divided nerves; electricity and massage whenever serious damage to nerves.—C. A. Herter.

Unilateral Lesion of Cord: Upper arm type—cervical enlargement (3-6

C.); lower arm type—lower cervical enlargement; loss of power of thumb muscles—lesion at 1 D.

Median Paralysis: Thumb adducted and extended along hand (ape-hand); cannot pronate arm or oppose thumb and fingers.

Ulnar Paralysis: Claw-hand; inability to adduct thumb or separate fingers; anesthesia of ulnar part of hand; usually from elbow injury or pressure.

Musculospiral Palsy: Loss of extension and supination when forearm is extended; weakened grip or drop-wrist; numbness and tingling down radial side of arm; commonly from lead poisoning.

Treatment: Use carefully padded and loosely applied anterior splint to maintain wrist and fingers on a line with forearm.—Church.

Musculocutaneous Paralysis: Weakened flexor power.

Circumflex Paralysis: Loss of power in elevating arm to right angle; atrophy of deltoid causes flattening of shoulder; usually from dislocation or fracture of head of humerus.

Paralysis of Long Thoracic Nerve to Serratus Magnus: Pain about shoulders; vertebral border of scapula prominent when arm is held straight forward; arm tires easily in brushing hair; palsy due to direct injury to neck, muscular dystrophy or spinal muscular atrophy (bilateral).

Suprascapular Paralysis: Difficulty in rotation, in writing and sewing; slightly drooping shoulder; due to trauma about neck and shoulder.

Paralysis of External Portion of Spinal Accessory: Defective action in rotating head to opposite side; wasted trapezius; from wounds, tumor or bone disease.

Treatment: Remove cause if due to pressure; electricity and massage in all peripheral cases; nothing can be done in nuclear disease.—De Schweinitz.

Phrenic Paralysis: One- or two-sided inaction of diaphragm; dyspnea and weak voice on exertion; from lesions of phrenic nerve or cervical plex-

us by shot wounds and stabs of neck, swollen glands, tumors, diphtheria and beri-beri.

Special Causes.

Cortical Hemorrhage: Sudden or gradual, spreading, with loss of consciousness; often twitchings; atheroma.

Cerebral Thrombosis: Often gradual; general endarteritis, syphilis or debility.

Cerebral Embolism: Sudden; cardiac valvular disease or sepsis.

Intracranial Neoplasms: Gradual with headache and changes in optic disc; limited convulsive movements in cortical; sometimes syphilitic history.

Hysteria: Sudden, with stigmata.

Traumatic Neuroses: Varies from amyosthenia up to total loss of power; may affect only certain movements.

Uremia: Sudden palsy after convulsions; albuminuria and casts.

Locomotor Ataxia: Pupillary and ataxic symptoms.

Acute Anterior Poliomyelitis: Flaccid of arm or leg; childhood; onset with chill, fever, prostration.

Tumor or Syphilis of Spine or Pott's Disease: Brachial paralysis in cervical lesions.

Local Pressure During Anesthesia.

Congenital Injury by Difficult Child-birth: Upper arm paralysis.

Congenital Syphilis: Brachial pseudomonoplegia from separation of epiphysis; may be crepitation on moving arm.

Myositis, Direct Blows on Muscles or Injury to Joints: Loss of power in parts concerned.

Chronic Lead Poisoning: Unilateral or bilateral wrist-drop, beginning in finger; lead colic, pallor, cachexia, blue line on gums.

Treatment: Best treated by massage of affected muscles and by constant current daily up to 10 minutes; treatment should be persevered with for a long time.—J. K. Fowler.

Chorea: Transient; may be some anesthesia; no R. D.

Occupation Neuroses: Writer's, telegrapher's or musician's cramp; paresis of certain coordinate movements.

Neuritis: Distribution of a spinal nerve or group—with pain and anesthesia; from trauma, exposure, pressure or toxemia; supinator longus of arm affected in pressure paralysis, spared in toxic paralysis.

Neuroma: Nodular swelling in course of nerve—pain and sensory loss in distribution.

Primary Muscular Atrophy; Paraly-

sis follows atrophy—no R. D.; first in biceps or triceps; cannot close eyelids in Landouzy type; weakened shoulder-girdle in juvenile or Erb's type. A family disease.

Progressive Muscular Atrophy: Loss of power and wasting begins in small muscles of hands; muscles of shoulders and arms next waste slowly; fibrillary tremors.

Treatment: Good hygiene; nutritious food; tonics; daily hypodermic injection of strychnin nitrate, gr. 1/100 increased to 1/40.—Stevens.

MEDICAL PROGRESS

Treatment of Mucous Colitis. The treatment of this condition is seldom satisfactory because of the underlying deep-seated neurosis. Frederick G. Oppenheimer (August Medical Review of Reviews) declares that a mixed diet of the most nourishing food should be ordered for these patients, and they must be made to understand that starvation tends to increase the severity of the disease. Arsenic and nux vomica or strychnin are useful for the anorexia. Vegetable and saline cathartics are contraindicated as being too stimulating. "A daily enema of normal saline solution and castor oil in doses of $\frac{1}{2}$ to 1 ounce, given three or four times weekly for weeks in succession, offer the best medication for warding off attacks." Angulations in the large intestines, when present, can be remedied in part by ordering a well-fitting abdominal support. Pressure upon the lower bowel by an enlarged and retroflexed uterus may require attention. Painful attacks simulating appendicitis and cholelithiasis are best relieved as a rule by a hypodermic of atropin, along with hot chamomile or turpentine stupes. Repeated high enemas of physiologic salt solution, or of a 1 per cent solution of Ems salt, or weak chamomile tea, are effectual in dissolving the mucus and hastening recovery from an acute attack. The diet during an attack should be of the simplest foods, omitting all articles which favor gas formation. For the intense tenesmus of which the patient often complains, small starch and opium enemas are best.

Treatment of Flatulency.—Excessive collection of gases in the stomach may be exogenous (air taken into the stomach while eating in quantities greater than normally or taken between meals by hysterical "cribbers") or endogenous (imperfect digestion, with formation of acids) in origin. Intestinal flatulence is nearly always endogenous, being due to indigestion, to lessened

expulsion of gases (general atony of intestinal musculature or mechanical obstruction by adhesions, kinks or visceral ptoses; obstinate constipation and colicky pains), or to lessened absorption of gases resulting from venous obstruction in the intestines (cardiac and hepatic disease). For the exogenous type of stomachic flatulency (frequent belching of enormous quantities of inodorous gases), Frederick G. Oppenheimer (August Medical Review of Reviews) recommends drawing the patient's attention away from herself; also outdoor exercise, cold sponges and the use of frequently repeated moderate doses of asafoetida. In treating endogenous flatulency due to indigestion, all fermentable foods (milk, butter-milk, cheese, eggs, rare meats, fresh bread and cakes, cabbage, beans, potatoes, bananas, soups, tea and carbonated drinks) must be avoided, and all food should be eaten slowly and thoroughly masticated. When gastric atony coexists, he advises giving tincture of nux vomica after meals, with or without a mild purgative (aqueous tincture of rhubarb). For odorous eructations drop doses of phenol are of service; or dilute hydrochloric acid (10 drops in a half glass of water, taken with meals) when the eructations are not sour (if sour, give bismuth, animal charcoal and sodium bicarbonate; calcined magnesia, if constipated; resorcin also useful). As palliatives in intestinal flatulency, salol and magnesium salicylate (10 to 15 grain doses after meals, alone or in combination with a purgative, such as compound rhubarb powder) are most efficacious. When flatulency is associated with constipation, a daily saline enema (until relieved of pain) and systematic massage of the abdominal walls several times a day, are indicated. The author is quite right, we think, when he concludes by saying that a careful examination of the circulatory system should be made, "for it is only by improving the venous

circulation in the intestines, that obstinate cases of flatulency can be overcome."

Arsenic and Digitalis in Pulmonary Tuberculosis. A. Jacobi (July New York State Journal of Medicine), after 28 years, repeats his belief in the great efficacy of these drugs in this disease. He recommends of arsenous acid, in the incipient stage, 1-15 to 1-6 grain daily; a little opium may be administered with it. He has given arsenic in thousands of cases of nervous and infectious diseases, and has observed no bad effects except edema, enteritis, dermatitis, or moderate neuritis. He never treats pulmonary tuberculosis without arsenic, never gives arsenic without a guaiacol salt, and seldom without a small dose (3 to 5 grains daily) of digitalis. The last named drug should be avoided only in acute inflammations of the heart, or in myocardial changes which bear no strain. Arsenic acts as a stimulant of the cells, and digitalis aids in nourishing the tissues.

Pituitary Extract in the Treatment of Rickets.—Klotz (quoted in New York Medical Journal) has gotten remarkably good results from the administration of pituitary extract, in combination with calcium carbonate, in the treatment of rickets. Five children between the ages of one year and two years, who were unable to walk or even to stand erect, actually began to walk in so short a period as from 8 to 15 days. The pituitary extract seems to be equally efficacious in osteomalacia.

The Syphilitic Pupil.—With negligible exceptions, says Wm. W. Graves (Medical Record, Aug. 24), the Argyll Robertson pupil is now universally considered a sign of tabes, paresis or syphilis. The Argyll Robertson pupils is almost invariably preceded by sluggish pupillary reactions to consensual or direct light stimulation, usually associated with asymmetry in pupillary form and differences in size. These last abnormalities also occur very frequently in syphilitics independently of sluggish reaction or failure to react to light. A sign of relative frequency is the abnormally small pinhead pupils—Erb's spinal miosis. When we can exclude synechia, abnormal development, etc., as causes for such signs, they may be interpreted as signs of a syphilitic infection.

Diet in Epilepsy.—Tom A. Williams (August Pacific Medical Journal) says it should be evident that reduction of common salt is a rational procedure in a disease where cerebral edema has been found in 22 per cent of cases operated upon. He recommends a diet somewhat as follows:—On rising, one-half glass of hot water containing ten grs. sodium bicarbonate. Breakfast: large plate non-acid fruit with cream, large plate cereal and milk, toast, no coffee, tea or chocolate. Dinner: no meat soups or gravy, 4-oz. well-cooked meat or two eggs, large plate green or succulent vegetables,

potatoes, not greasy; sweets, no gelatine. Supper: similar to breakfast, but macaroni or other pate, or rice pudding may be taken for cereal and one egg may be taken also. Graham bread thrice weekly. Distilled water to be taken freely between meals. At night: one-half glass hot water containing 30 grs. potassium citrate.

A Simple Treatment for Ganglion.—For a long time D. W. Basham (August Medical Council) has been treating successfully every case of encysted tendovaginitis by tapping the swelling with a short trocar and cannula, and expressing the contents by gentle manipulations with the fingers over the tumor and with the cannula in situ. After the thick fluid has been forced out or aspirated through the cannula, a bit of cotton wound about the end of a slender probe and dipped in tincture of iodine, is passed in through the cannula, and the cavity is thoroughly mopped. Then, with the cannula still in place, a small compress is applied and a bandage is run on to maintain the pressure. Finally the cannula is withdrawn, and pressure continued for ten days to two weeks.

Non-Medicinal Measures in the Treatment of Chronic Constipation.—Heneage Gibbs (August American Journal of Clinical Medicine) says that in sedentary subjects a moderate amount of exercise in walking—beginning with short walks and gradually increasing the distance traveled—will often effect a cure if faithfully carried out, especially if the practice is taken early in the morning and if a glass of warm water is sipped before starting out. Fresh ripe fruit and well boiled fresh vegetables are of well known efficacy. The regular use of a prune and senna stew (senna leaves in a muslin bag, placed among the prunes while being cooked) is one of the best methods of overcoming constipation.

Formaldehyd for Excrescences.—R. L. Hammond (July American Medicine) has used the usual 40 per cent aqueous solution with satisfactory results in the removal of verruca, clavus, callositas, nevus pigmentosus and cornu cutaneum. A wooden toothpick is dipped in the liquid and the adherent drop is applied to the surface of the wart, corn, callosity, or mole, every 3 or 6 hours for two or three days. One should avoid touching the normal skin, lest dermatitis and scarring result. After several days in small excrescences, and in about a week in the larger ones, pain is felt, devitalization of tissue occurs, and the application of the agent having been discontinued the growth will desiccate and exfoliate, leaving the dermal surface free from blemish; if it is not, another application or two will secure the desired result. In extensive callosities the remedy may be applied with a brush 3 times daily for several days, then discontinued and the parts allowed to dry, when by soaking the epidermis with warm water it can be

rubbed off. In coru cutaneum the horny growth should first be clipped as near the matrix attachment as possible, and the agent should then be applied as often and as thoroughly as can be done with comfort.

A New Principle in the Treatment of Diabetic Coma.—A Chauffard and H. Rendu (quoted in Medical Record, Aug. 31) demonstrate that acute dehydration occurs in diabetic coma, partly from vomiting, diarrhea and polyuria, but mainly from the polypnea present. The patient breathes at the rate of 25 to 40 times per minute for a period of from 24 to 48 hours preceding death. This very active pulmonary ventilation causes an enormous increase in the loss of water to the organism. The authors suggest that treatment should be directed, not only toward acidosis, but also against the dehydration and increased viscosity of the blood. Instead of the administration of concentrated solutions of alkalies, they advocate the employment of isotonic solutions titrated to 15 or 20 grams per liter, giving a liter of such solution intravenously.

An Aid in the Diagnosis of Laryngeal Ulceration.—Fluorescein solutions have long been used by oculists in demarcating corneal ulcers, the denuded areas showing a greenish coloration. Adolph O. Pfingst (September Louisville Monthly Journal of Medicine and Surgery) commends Albert Rosenberg's method of employing fluorescein as an aid in the diagnosis of pharyngeal and laryngeal ulceration, a weak solution outlining the ulcer by the yellowish-green appearance which it imparts and which usually lasts for several hours. Rosenberg employs a 2 per cent alkaline solution of the stain, applying one or two drops to the suspected area. Fluorescein has a peculiar affinity for devitalized epithelium, and stains coated parts of the tongue yellow, as well as the horny layer of cells in the posterior part of the larynx in pachydermia laryngis.

What is One Animal's Food is Another's Poison.—At the recent meeting of the state food commissioners and government and state chemists in Seattle, Elton Fulmer, state chemist of Washington, said: "I remember a few years ago, it became my duty to investigate the poison parsnip,

which grew in western Washington quite extensively, and I extracted considerable oil from the parsnip. While doing so a mouse was injudicious enough to run across the floor of my laboratory and I caught the little fellow, and I took the sharp point of a toothpick and dipped it in the oil and I rubbed it over the jaws of the mouse, and fifteen minutes later he was dead. The next day I took a cat and fed it in large doses, and it simply called for more. When we get such astonishing results among the lower animals it is quite safe to say that we are not able to reach conclusions as to effects upon human beings from the effects on animals."

Lordotic Albuminuria.—Franz Hamburger (quoted in American Journal of Dermatology) agrees with Oehles that the albuminuria of puberty may be caused or increased by a lordosis of the lumbar vertebrae, leading to blood stasis in the kidneys. This mechanical factor is usually attended with vasomotor disturbances which tend to augment the amount of albumin in the urine.

Treatment of Chronic Diphtheria. The paralyzes of diphtheria appear to be due, not to the soluble toxins (neutralized by antitoxin), but to the insoluble endotoxins. In an effort to cause the disappearance of diphtheria bacilli from the throats of diphtheria carriers or of chronic cases of diphtheria, Hewlett and Nankivell (quoted in Medical Record) got good results from injections of diphtheria endotoxin, prepared by growing the virulent organism on serum or blood-agar in Roux bottles, collecting the growth, washing two or three times by centrifuging with sterile physiologic salt solution (to remove any adherent toxin), grinding the bacterial mass by the Macfayden method in the presence of intense cold, and filtering the ground mass through a Berkefeld filter. The filtrate containing the endotoxin is standardized by the addition of sterile salt solution so as to contain 2 to 5 mgm. of the endotoxin per c. c. The best results have followed an initial dose of 2 mgm. endotoxin. If necessary, a dose of 5 mgm. is given a week or ten days later, and is repeated after a similar interval if the culture from the throat is still positive.

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EDITOR

EDWARD C. HILL, M.D.,

GEO. H. STOVER, M.D., Consulting Editor.

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THE DOCTOR'S INVESTMENTS.

Every physician knows, or realizes before his experience covers very many years, that he will not be able to accumulate a competency for old age or "rainy days" from the emoluments of his professional labors. It is true that a few do succeed largely in a financial way from professional income alone, but these are very few in number, fewer than most of us think.

Naturally, the physician who realizes the facts, casts about him for ways by which he may add to his store of capital. As a general rule he has neither the time nor the training in business to devote his personal attention to productive side-lines.

He must therefore place his savings in such a way that they will draw an income, and in time amount to a stay for the days when he shall become in-

capacitated by reason of age or failed strength.

The physicians are the first to be visited by the enthusiast with a patent or an idea, for an automatic press-feeder, a non-refillable bottle, a lightning-change invalid's bed, a sanitary spit-box, a portable telephone booth, an automatic stamp vender, or any of ten thousands of useful-seeming devices with which we have all been tempted.

It would seem that by common consent, promoters consider that the physician can be separated from a little money somewhat more easily than any other class of man.

And I believe it is true that as a class physicians are free investors, for the reasons given above.

But if we look over the fields in which physicians have invested their hard-won savings, in what a large proportion of these investments do we find

that the physicians have only been the victims of ignorance, incompetence, or scoundrelism on the part of those who have lured from them their money!

Doctor, what return have you had from the money you have put into dry-farm lands or lands which are "sure to be under water supply next season"; or the irrigation scheme which owns such fine priorities; or the rubber plantation; or the sugar plantation; or the banana plantation; or the apple orchard? True, there are many of these enterprises which are wonderful successes, when managed by their owners, but how about the ones which have sold stock to you?

I am just asking for information.

For instance, what of the dividend-paying quality of

The Geyserite Soap Co.?

The Solar Motor?

That wonderful Wireless Company?

San Gabriel Plantation in Mexico?

The Teslin Dredging Co.?

The Amsterdam Diamond Co.?

The Mutual Irrigation Co.?

The Western Slope Investment Co.?

The Telepost?

The Airline Railroad?

The Oxford Linen Mills?

Denver Steel & Wire Fabric Co.?

Colorado Interurban R. R. Co.?

Fairmount Mausoleum?

Bezant Gold Mining Co.?

Brinkerhoff Stamp Vending Machine?

De Clairmont's Peruvian Gold Placers?

Stewart River Gold Dredging Co.?

International Automobile & Engine Co.?

Big Four San Juan Oil & Dev. Co.?

Colorado Highland Marble Co.?

I have a drawer in my filing-cabinet labeled "Investments Indefinitely Postponed." Into this drawer I put prospectuses, etc., of enterprises in which I do not invest. If any of the above list are making good, I would like to know it. I find their literature in this drawer, and if any of them are divi-

dend-payers I might put them on my active list.

I shall not humiliate myself by publishing the list of stocks in which I have invested. One or two of them are all right in a moderate fashion. One or two I believe will be good after a while, not having expected immediate returns when investing in them. But a whole bunch of them will never, never, no, never, be worth a damn.

Now, what are good investments for you? I don't know. I have proved that I don't know.

Government bonds have so far always been good. It is better to get three per cent and have your capital, than hope for 100 per cent gains and lose the whole business. Legally issued municipal bonds and school district bonds pay five or six per cent and are safe. There is more money in first mortgage loans on improved property than in owning property for rental purposes, as a rule; and a darned sight less bother, worry, and annoyance.

If you are in a small town perhaps you can get in with a banker, a merchant or two, and a few others with money and organize a public utility company, gas or electric; if you are one of the organizers, promoters, and original stockholders, you will make money, if some bigger outfit from outside doesn't come in and squeeze you to death.

Bonds, and sometimes stocks, of the large public utility companies, are apt to pay moderately and regularly.

But don't put up your money to exploit a new invention, or to start a new enterprise, or to put a struggling one on its feet.

If you have some money which you can lose just as well as not, and if you are feeling either desperate or rather sporty, you might take a flyer in oil or mining, but remember what usually happens to flyers sooner or later.—Stover.

THE HIGHER COST OF LIVING.

In his thoughtful work on "The Evolution of Modern Money," William W. Carlile quotes Mommson as saying: "The commodity which becomes money must above all things not be the one which is indispensable for the supply of the most urgent material needs. It is for this reason that in no country has corn [that is, wheat] ever been used as the comparative measure of the value of other merchandise; and that mankind, after having, from the most remote antiquity, successively and in various countries employed as money cattle, iron and copper, have uniformly ended with silver and with gold." It is interesting to note that silver was more valuable than gold in the dawn of civilization, and that in fact silver was the standard of value in Rome until the days of the Empire, and in England until the 18th century. Most of us in Colorado wrongfully thought, some 16 years ago, that silver should be remonetized at the ratio of 16 parts to one of gold.

Since the demand for gold is insatiable, economists had believed that it would not depreciate in value, no matter how much the world's stock were increased. This stock has doubled in 30 years, and is now augmenting nearly half a billion dollars annually. The extraordinary increase in our circulation money (\$973,000,000 in 1880; \$3,100,000,000 in 1910) is now generally accepted as an important cause of a lessening in its purchasing power, with resultant increase in prices. A still more important reason, brought out by Henry Wallace in the *Youth's Companion*, is the great relative increase of urban as compared with rural population (in 1880, 11,318,547 urban and 38,837,236 rural; in 1910, 42,625,383 urban and 49,348,883 rural). The rise in prices is world-wide. The influence of the "protective" tariff, of "trusts" and of railway combinations in this country is at least a subordinate issue, however magnified by politicians.

The present period of financial uncertainty and social unrest is well described by Robert Luce in *The Independent*. He says, *inter alia*: "Never has there been so great a change in the standard of value over all the world, in so short a time. Never have the evils of a fluctuating standard of value been made so apparent. Huge have been the undeserved losses by some, huge the unearned gains by others. To illustrate, note what has happened to depositors in savings banks. The man who deposited \$100 in 1896 in a bank paying $3\frac{1}{2}$ per cent compounded semi-annually, drew out in 1910 less in purchasing power than he had invested, on the basis of wholesale prices. He had progressed backward. Professor Norton has estimated that this has meant a loss of more than a thousand million dollars to the savings bank depositors of this country alone in the last 15 years." The cost of living follows retail rather than wholesale prices, and in the last 15 years has risen about one-fourth. Again: "Rising prices, by lessening the worth of every deferred payment, of every investment that is in the nature of a loan, aid debtors at the expense of creditors, and so dishearten thrift. By increasing the uncertainty of every investment, they discourage saving. For the same reason, they inevitably foster speculation, and the promotion of wild-cat schemes of every variety, developing the conditions that end in crisis and panic. Their period is marked by the mushroom growth of unbridled extravagance, with blatant display of waste and folly. While a few gain, the many suffer. Because salaries or fees do not rise as fast as expenses, men ordinarily intelligent and fair become exasperated and unreasonable, and look to the ballot box for revenge against their troubles. Political upheaval follows, with rash changes that usually do more harm than good, because not based upon reason." Which leads us to remark that, after all, a man's best

capital is in his head—intellectual competence and scientific skill.

Physicians are hit harder than mechanics by the rising scale of prices, since it is difficult to get more than the customary fees, and besides the proverbial cardiomalacia with which most doctors are afflicted inclines them to "temper the wind to the shorn lamb." Medical men are frequently the last to be paid for their services (when some of their patrons "thrash their oats," it has been said), but a policy of prompt statements and business-like dealings will cause a gratifying increase in the revenue. Riches are hardly to be secured in the practice of medicine, but independence is to be desired, and there is no reason in the world why the medical practitioner should be a "benevolent pauper."

PTOSIS.

Stedman defines ptosis as "specifically a drooping of the upper eyelid, due to a fault of development, to paralysis of the levator palpebrae muscle, to a weighting of the lid by a tumor, or to recession of the supporting eyeball." True ptosis depends on lesions of the third nerve (base of brain, cavernous sinus, sphenoidal fissure; external strabismus), nuclei (often ophthalmoplegia), corporal quadrigemina and striata. It occurs with opposite hemiplegia in lesions of the crus cerebri or the fascicular fibers. Blepharochalasis, or pseudoptosis, is "a condition in which there is a redundancy of the upper eyelids so that a fold of skin hangs down, often concealing the tarsal margin when the eye is open." In the symptom-complex of Horner, due to paralysis of the cervical sympathetic, we find, in addition to ptosis, miosis, anidrosis and enophthalmos.

Among special causes of unilateral ptosis may be mentioned: Congenital defects (usually with diminished power of raising globe); slight cortical hemor-

rhage (rarely without strabismus); nervous syphilis (drooping often transitory and alternate); severe neuralgia of fifth nerve; locomotor ataxia (sometimes recurrent diplopia); hysteria (orbicular twitchings when patient told to look up); reflex irritation (commonly through fifth nerve, as by extraction of tooth; usually only transient); astigmatism; isolated palsy of fourth nerve (from basal growth or meningitis); peripheral neuritis (from cold, alcoholism or lesion of third nerve (isolated ptosis usually of nuclear origin), or circumscribed cortical lesion of frontal lobe in front of fissure of Rolando (cerebral symptoms); and facial hemiatrophy (ptosis, divergent strabismus, enophthalmos). Unilateral pseudoptosis may be caused by cicatrices from erysipelas, cellulitis or periostitis and adhesions between lid and eyeball.

Bilateral ptosis is frequently observed in hysterical subjects, who tip the head back when told to look up, resist lifting the lid, and are "contrary and demonstrative." For such patients Gowers recommends blisters to the temples and faradism. Sleep ptosis is often complained of by neurotic, anemic women on waking, as well as in persons who sleep very soundly. Gowers says that morning ptosis is always quickly relieved by applying chloroform liniment on spongiopiline to the skin about the orbit. Other causes of bilateral ptosis are poisoning by gelsemium, conium, sulphonal or iodoform; locomotor ataxia (sometimes with recurrent diplopia); diphtheria and other adynamic infections; hereditary predisposition (slight drooping counteracted by frowning); congenital nuclear defect (usually with inability to elevate eyeball); basal syphilis, meningitic deposits or tuberculosis (sometimes internal squint when corpora quadrigemina involved); and paralysis agitans (mask-like face and passive tremor).

WHY ANALYZE THE URINE.

The day is gone when the good old family doctor would take a specimen of urine, shake it, hold it to the light, remove the cork, take a sniff, make a face, and throw the bottle into the slop-bucket.

We analyze the urine both for what it shows and for what it fails to show. That is to say, our negative findings often aid as much in coming to a diagnosis by exclusion, as do our positive findings in coming to a direct diagnosis.

One of the most important features of the urine is its daily quantity. Certainly the kidneys are not functioning well when a person is passing only ten or twelve ounces of urine in 24 hours, but the primary fault here may be with the heart, the vaso-motor nerves, or with a habit of neglect in drinking water.

The specific gravity gives useful therapeutic indications. Here in Colorado, because of the large amount of insensible perspiration, it is normally higher, at least in summer, than in the East. As is well known, low density points to chronic interstitial nephritis, and high density of diabetes mellitus; but I have seen not infrequently sugar in urine below 1.020, and have also noted a specific gravity above 1.040 in a patient who was ingesting massive doses of potassium iodid.

The degree of acid reaction (stated in cubic centimeters of decinormal alkali required to neutralize 100 c. c. of urine) is, in my opinion, of greater practical importance than, let us say, the daily quantity of uric acid. High acidity (above 30°) commonly goes with neuritis, neuralgia and the so-called muscular rheumatism, all of which may be greatly ameliorated by thorough alkalization. A good remedy for this purpose is sodium citrate, a heaping teaspoonful in a glass of water two to four times per diem. Fixed alkalinity is frequently observed in neurasthenics

and vegetarians. Ammoniacal urine when freshly passed is, in my experience, not very common, and is noted in the retention of paralysis and in very chronic cystitis.

Urinary consistence is of little practical significance, except in those cases of chronic cystitis with a large amount of pus. These patients sometimes have difficulty in emptying the bladder, because of the glairy muco-pus, rendered viscid by the action of the alkali present. As for the odor of the urine, I have never found it of much service in diagnosis, although some authors remark upon its being peculiar in this or that disease. Cloudy urine, except for a slight nebula near the bottom on standing, is never normal, yet the urines of diabetes and of chronic interstitial nephritis are usually specially clear. The commonest sediment is that of amorphous urates, usually reddish in color (the so-called "brick dust" sediment), easily distinguished by its clearing on heating below the boiling point. When not due to fever, such a sediment commonly means that too little water is drunk, that the heart is weak, or that it is a cold day. Earthy and triple phosphates give rise to a grayish sediment in alkaline urine, and are cleared, not by heat, but on treating with acetic acid. "Phosphaturia" usually means the same as fixed alkalinity; that is, general debility and neurasthenia.

A collection of uric acid appears macroscopically as a slight or moderate sediment somewhat resembling cayenne pepper. Microscopically it shows up ordinarily as large flat oval crystals, the so-called whetstones, colored yellow or reddish by the coloring matters of the urine. When rough and sharp, gathered in rosettes and accompanied by red blood cells, think of stone or gravel. Conditions of indigestion may lead to a copious deposit of uric acid crystals some hours after meals. Closely related to uric acid crystals are those of calcium oxalate, the "en-

velope" crystals. These hard, sharp octagons are the most common crystals in the urine. They arise from fermentation of carbohydrates, and also more directly from certain foods, particularly rhubarb, tomatoes, spinach and asparagus. Oxaluria is naturally accompanied by considerable mucus, and clinically is sometimes known as "false Bright's disease," because of the irritation of the crystals all along the line of the urinary tract.

Pus is the most frequent formed element in the urine. In women it is generally leucorrheal in origin—in men, gonorrheal. As tell-tale evidence gonorrheal shreds are unsurpassed, often lingering in the urine long after a man has become old—and good. The source of pus from the urethra is self-evident. When coming from the seminal vesicles or the prostate, it is more or less increased by massage of these organs. To distinguish between cystitis and pyelitis is not always an easy matter, and indeed they are often coexistent. In both conditions we may find frequent, painful urination with pus and albumin. The character of the epithelial cells and the amount of albumin (always distinct in pyelitis—less so in cystitis) aid us, along with physical signs, in coming to a correct conclusion. Drs. Stover and Fowler have shown us how, by means of the ureteral catheter and the injection of a silver salt, the drainage status of each kidney can be accurately determined. Hematuria in women is most frequently of uterine origin. In men and women and little children it may be due to stone or tubercle or tumor. The persistence of washed-out blood rings points to stone, but the x-ray is the one certain means of diagnosis. I have found the antiformin method of concentrating tubercle bacilli of great service in testing for urinary tuberculosis. Profuse hemorrhage from the bladder or the kidney is strongly suggestive of a new growth. Urine which is cloudy after filtering is loaded with

bacteria. The most frequent pathogenic habitant of the urine is the colon bacillus, which prefers an acid medium, but can thrive, as in the bowel, in alkaline environment. Microscopic examination of the centrifugated, dried and stained sediment is particularly important in these days of vaccine therapy and selective chemic remedial agents.

Since the days of Richard Bright, albuminuria has taken first place in urinary diagnosis. Not long since, this symptom was considered equivalent to Bright's disease, but we now know there are at least one hundred other distinct causes of albuminuria, all of which perhaps can be grouped under the types of functional, nervous, circulatory, obstructive, hemic, toxic, febrile and false or adventitious causes. One often sees, for instance, an albuminuria of from 5 to 20 per cent by volume greatly lessen or disappear under treatment directly solely to the heart and blood vessels. The crucial test, in my opinion, as to the nephritic nature of an albuminuria is the presence of a blood pressure distinctly and persistently high for the individual under examination. The presence or absence of casts is not an absolute criterion as to Bright's disease. Hyaline casts may mean interstitial nephritis, or merely overexertion, or the irritation of some toxin or poison passing through the kidneys. Blood casts are characteristic of acute nephritis, and pus casts of the "surgical" kidney. Granular casts usually indicate some organic trouble, and true fatty casts are observed, along with other kinds, in chronic parenchymatous disease. Broad casts, from the collecting tubules, are of evil omen, commonly signifying that death is near.

There are some cases of albuminuria which have been difficult to explain on any hypothesis heretofore set forth. Perhaps these are best elucidated by the new theory of nephritis of Martin H. Fischer of Cincinnati, being the Cartwright prize essay of the Associa-

tion of the Alumni of the College of Physicians and Surgeons of New York. Dr. Fischer holds, from staining kidney sections and other experiments, that albumin in the urine is derived from the kidney itself, through the action of accumulated acids, changing hydrogels to hydrosols. He therefore treats the condition by the intravenous or rectal administration of concentrated solutions of alkalies and salt.

The kind of sugar present in diabetic urine is nearly always dextrose. The polarimeter is the most certain means of determining its presence and quantity. Were not this paper already long enough, one might expatiate upon a number of interesting matters, such as the urinary changes in the hepatic toxemia of pregnancy, the relation of acetoneuria to vomiting and coma in children, uric acid as an effect rather than a cause of pathologic conditions, and the isolation of lead, mercury and other poisons from the urine.

THE STATE MEDICAL SOCIETY

The forty-second annual convention of the Colorado State Medical Society, which convened in general session on Tuesday, September 24th, in the Congress Hotel, in Pueblo, was one of the most successful, from every viewpoint, ever held by the Society. The enrollment passed the record mark on Thursday afternoon and reached 223 before the end of the session.

The interest in the very excellent scientific program was at the highest pitch throughout the entire meeting, and the program committee was repeatedly commended for the superior character of the work presented. Especially are they to be congratulated upon securing Drs. Crile and Green, whose masterful simplification of the subjects they discussed fascinated their large audiences, holding the almost breathless attention during the two hours of their addresses.

There has never been a convention better presided over than the forty-

second annual convention of the Colorado State Medical Society. Dr. Walter Jayne presided with a dignity, precision and justice rarely equaled in the convocation and deliberation of scientific assemblies. His rulings were without fear or favor and delivered with a promptness which greatly expedited the work of the meeting.

The president's annual address was truly, as many expressed it, a classic. Its every period gave evidence of painstaking preparation and scholarly conception of the province of medicine in human economics. The conclusions summarized the accomplishments and progress of the past, the status and duty of the present, and the prospect and hope for the future of medicine.

But those who failed to attend this record-breaking meeting at Pueblo should know that in missing the scientific feast which was offered they were missing but a part that Pueblo presented.

Dr. Frederick Singer was chairman of the entertainment committee; indeed, the members of that committee say that he was the whole show. However that may be, a most excellent round of pleasure was provided for the visiting doctors and their ladies.

A loose-leaf morocco souvenir note book was presented to each doctor. In this were cards entitling the holder to privileges of the public utilities and entertainments, such as free long distance telephone service, free street car transportation, admission to the several theaters, clubs and industrial plants of the city, and free storage in all of the garages.

Dr. and Mrs. Hubert Work received and entertained about 500 guests in their beautiful home, Woodcroft, on Tuesday evening, in honor of President Jayne. A lawn fete and ball afforded a most delightful entertainment.

A camp breakfast and trap shoot started off the "Big Day," Wednesday. This was attended by about 200. An auto ride over the city followed at 9

a. m. In the afternoon about 100 of the visiting ladies and friends attended the reception given at Casa Vivienda, the home of Dr. R. W. Corwin and staff of Minnequa Hospital. The "Big Day" ended in a blaze of glory—The Harvest Supper—a most unique entertainment given at the Minnequa Country Club. The menu consisted of fried chicken, roast beef, cider, pumpkin-pies and oratory. There were 500 plates laid and a most beautiful and befitting decoration of ripened wheat and oat sheaves, corn and pumpkins with fruit and melons artistically arranged.

Dr. Fredrick Singer, the toastmaster, was presented a silver loving cup by the State Society as a token of appreciation for his services as state organizer. The presentation was made by President Jayne.

Taken altogether, the meeting was the biggest scientific and social success in the history of the State Society.

Dr. J. A. Black of Pueblo, was elected president for the ensuing year, and Dr. Edson of Denver, First Vice-President. The next meeting is to be held in Glenwood Springs, in October, 1913.

ONE WHO WAS THERE.

PERSONALS

By the Editor and Associate Editors.

Dr. H. L. Williams of Flagler was a recent visitor in Denver.

Dr. J. H. Morgan has removed from Fort Collins to Carthage, Mo.

Dr. Mary Hawes is visiting her mother at the old Kentucky home.

Dr. O. A. Grantham of Johnstown, Colo., was in town the other day.

Dr. W. W. Grant made a fishing trip to Wyoming in early September.

Dr. F. L. Dixon has returned from a visit of several weeks in the East.

After six years' absence, Dr. Edwin C. Reed has returned to Pueblo.

Dr. Hubert Work was seen in Denver the second week of September.

Dr. O. L. Whitson has returned to Pueblo from a month's trip in the east.

Dr. and Mrs. Oscar Hayes recently spent a pleasant fortnight at Electric Lake.

Dr. C. W. Enos has returned to Denver, after several weeks' visit in the East.

Dr. T. J. Gallaher has returned from his summer vacation and is busily at work.

Dr. C. E. Fisher is running as congressman-at-large on the Progressive ticket.

Dr. and Mrs. George Monson had a pleasant outing in Wyoming during August.

Dr. John Grass is one of the Progressive candidates for presidential electors.

Dr. W. P. Hunnicutt is the Republican candidate for coroner of Pueblo county.

Dr. James F. Alexander, of Brighton, came to Denver, September 27th, with a patient.

Dr. W. Lowe, who has been practicing at Dodge City, Kansas, is again in Denver.

Dr. Arthur T. Monismith of Fort Lupton spent a couple of days in Denver last month.

Dr. and Mrs. C. Lester Hall of Kansas City have been visiting friends in Pueblo.

Dr. Robert Levy has returned to Denver after a pleasant sojourn in California.

Dr. and Mrs. George F. Libby spent sev-

eral weeks in the late summer at Cherokee Park.

Dr. H. R. Stilwill has changed his residence from East Colfax Avenue to Park Hill.

Dr. Earl D. McGill of Wray was in the Capitol on professional business twice last month.

Dr. and Mrs. Wm. S. Bagot spent the mid-foortnight of September at Glenwood Springs.

Dr. and Mrs. Edgar P. Hershey have taken apartments for the winter at the Hotel Metropole.

Drs. Victor O. and Elizabeth Saphro have removed from Washington, D. C., to Longmont, Colo.

Dr. George W. Perrin and family are located at 1635 East Thirteenth avenue for the winter.

Dr. Thomas A. McIntyre of Cripple Creek spent a few days recently in the Queen City of the West.

Dr. and Mrs. K. C. Saperro have returned to their Denver home, after a long absence in California.

Dr. O. M. Gilbert of Boulder went to Vienna last May and will not return until early in the new year.

Dr. and Mrs. Edgar Morrill of Longmont, have been visiting Boston, Baltimore and other eastern points.

Dr. and Mrs. Samuel B. Childs spent their late summer vacation in the highlands near Grand Lake.

Mrs. Dr. P. J. McHugh has been elected president of the Colorado Associated Federation of Women's Clubs.

Dr. and Mrs. John Wesley Harris have returned to Denver from an extended automobile tour of Europe.

Dr. George P. Lingenfelter has been appointed a first lieutenant in the Medical Reserve Corps, U. S. A.

Dr. W. H. Marshall and Miss Ona Belle Pittenger, both of Trinidad, were married in Denver, September 17th.

Dr. Carroll E. Edson has been appointed a member of the city library board, and will take up the work at once.

Dr. Carmel Kennedy, who is conducting an up-to-date hospital with Dr. Cole in Yampa, spent a week in Denver last month.

Dr. H. B. Killough, police surgeon of Pueblo, was called to St. Louis last month by the serious illness of his father.

The American Public Health Association, recently in session in Washington, D. C., will meet next year at Colorado Springs.

Dr. C. M. Spicer is the Democratic candidate, and Dr. J. H. Kellogg the Republican candidate, for coroner of Prowers County.

Dr. Mary A. Ingersoll has passed the primaries test as a Republican candidate for state representative from the Denver district.

Dr. Sidnar Morgan and Mrs. Elinor Miner Morgan were united in matrimony, Aug. 27, and are at home at 1840 California street, Denver.

Dr. Omer R. Gillett of Colorado Springs attended the convention on hygiene and demography at Washington, D. C., last month.

Dr. O. J. Pfeiffer came successfully through the primaries as a Republican candidate for the long term regency of the state university.

Dr. T. H. Close, now at Parker, Colo., made a wild night ride, a few days ago, to bring a patient with a ruptured appendix to Denver for operation.

We are pleased to note that the wife and little daughter of Dr. Claude C. Keeler, who were recently injured by an automobile, have wholly recovered.

Paul V. Muckle has opened a small instrument store and surgical repair shop in the Metropolitan Building. W. H. Lauth is now at 1632 Court Place.

Dr. Edward F. Milligan, formerly an interne at St. Luke's Hospital, and now located at Geary, Okla., was shaking the hands of old Denver friends recently.

Dr. W. A. Burton has devised and perfected a very ingenious little polypus ear snare, which appears to be ahead of anything else at present in use.

Drs. George W. Miel and Frank Finney are on the program for addresses before the Santa Fe Railway Surgeons' Association, to be held at Albuquerque, Oct. 4-5.

Drs. Leonard W. Ely, A. J. Markley and T. E. Carmody read papers before the Wyoming State Medical Society, which convened at Sheridan in the third week of September.

Dr. Augustus Perkins, a pioneer Golden physician, died at the home of his daughter in Denver, September 10, at the age of 72. He had given up active practice about ten years ago.

Dr. W. L. Horn of Boulder is taking a well-earned rest on his large ranch in Dako-

ta. He has been very successful not only in his practice, but in his investment in farm lands.

The new solarium on the grounds of the Jewish Consumptives' Relief Society, Lakewood, was dedicated with fitting ceremonies on September 22nd. The building accommodates 125 patients.

The Pueblo County Medical Society gave a tasty luncheon at the Hotel Vail, Aug. 28, to the druggists and other friends who had given substantial aid in making the Clinic Week a success.

We note with pleasure that Dr. R. W. Hoyt is a Bull Moose candidate for representative from the first district. Dr. Hoyt would do honor to the medical profession in the legislature, and he should receive the support of every Denver physician.

Herbert C. Jackson, son of Dr. Edward Jackson, and a young artist of great promise, died at Longmont, September 19th, from cerebrospinal meningitis, it is believed, after only three days' illness. The medical friends of Dr. and Mrs. Jackson sympathize with them in their great bereavement.

Dr. W. P. Spence, Cortez, Colorado, has sold his practice to Dr. E. E. Johnson of Chicago. Dr. Spence will go to Chicago for a year and take a special course in eye, ear, nose and throat. It is pleasant to know that before leaving Cortez the doctor ordered his Denver Medical Times sent to his Chicago address. Herein the doctor shows good judgment and thoughtfulness.

The first fall monthly luncheon of the Denver County Medical Society, held at the Savoy, September 18th, was well attended, with Dr. Wm. H. Davis presiding. Health Commissioner, J. M. Perkins rendered a recitation from James Whitcomb Riley, designed to show the fallacy of becoming rich, and Mayor Arnold gave an interesting talk upon the past, present and future of Denver's health department.

Our old diaphanous friend "Ethics" has received another rather rude jolt. It seems by the accounts in the daily papers that Dr. A. B. Hardin of Sterling, Colo., attempted to collect a bill from a young man, and not succeeding in this, he hammered him with a broomstick; this failing, he used a heavy club. The doctor having concluded the job to his satisfaction, left the young man semi-conscious, and, it is said, with a fractured skull. The doctor is under a \$500 bond.

There is not a doubt but that this doctor is loud mouthed in his advocacy of "Ethics," that he looks with horror on a journal which carries the announcements of makers of medicinal products, and all the other rigmale of superheated tommyrot—oh, rodents!

At the first fall meeting of the Medical Society of the City and County of Denver, Sept. 3, Drs. Black and Jayne announced the gift of \$5,500 from the Association of the Denver and Gross College of Medicine to the medical society, as an endowment fund for the library. The interest on the fund will be used to secure

medical journals and books. Altogether the future prospects of the library are very bright.

The officers of the Colorado State Medical Society for the ensuing year are as follows: President, Dr. John A. Black of Pueblo; vice-presidents, Drs. Edson, Halley, Calkins and Ringle; delegate to the A. M. A., Dr. W. A. Jayne; alternate, Dr. W. F. Singer; councillor, Dr. H. G. Wetherill; chairman of publication committee, Dr. George A. Moleen.

Even the best friends of Dr. W. A. Jayne were surprised at the admirable manner in which he filled the presidential chair at the recent meeting of the C. S. M. S.

Prof. Dr. H. Strauss of Berlin will lecture at the New York Post-Graduate Medical School and Hospital, Second Avenue and Twentieth Street, on October 12th, 14th and 15th, on the Diseases of the Stomach and Kidney. Prof. Dr. Carl von Noorden, Physician in Chief to the City Hospital, Frankfurt, Germany, will also deliver a series of lectures on the Pathology and Treatment of Diabetes, Radium Therapy and Arteriosclerosis at the same place, on October 28th to October 31st inclusive.

Dr. John Jay Taylor, founder and editor of the Medical Council, died at his home in Ocean City, N. J., Aug. 1, from exhaustion due to cancer of the tongue, from which he had suffered for more than two years. Dr. Taylor was a true gentleman, a successful practitioner and an able medical editor. The Medical Council, now in its eighteenth year, has long ranked as one of our most practical and readable periodicals. Dr. Thomas S. Blair, the new editor, has been connected with the journal in an editorial capacity for several years, and will doubtless make good. Mrs. Taylor, as proprietress, will continue to direct the business organization.

The committee of Medical Society of the City and County of Denver, appointed by President Davis, on motion of Dr. Beggs, to investigate the telephone situation, reported, through its chairman, Dr. Wetherill, at the second September meeting, in favor of the proposed new city ordinance supported by the Business Men's Association.

A vote of the society was nearly unanimous in endorsing the recommendations included in the report. If this ordinance goes into effect, the physicians of Denver will have 350 calls per month (now 100, formerly 50) for a charge of \$4.00, and considerable reductions will also be made in the charges for residence service.

Larimer County Medical Society. Regular meeting Sept. 4, 1912. Met in the Y. M. C. A. building. There were present Drs. Replogle, Kickland, Rew, Geith, Carey and Stuver. In the absence of Dr. McFadden, the president, and also of Dr. John F. Morgan, the vice president, who has removed to Carthage, Mo., on account of his wife's health, Dr. Replogle was elected president for this meeting. The minutes of the March meeting were read and approved. The question as to the method of conducting the work of the society for the ensuing year was generally discussed, and the secretary instructed to prepare a list of questions which shall be drawn from a box and discussed extemporaneously at the next meeting in October. Dr. Rew, who had charge of the meeting for the evening, read a paper on constipation. He gave a clear and concise outline of the remedies used in the treatment of the disease. In the absence of a couple of other physicians who were to discuss other aspects of the subject, it was thrown open for general discussion and all the doctors present took part. Dr. Geith called attention to the prevailing method of using laxatives and cathartics in surgical practice, and advocated the plan of waiting several days after an operation before resorting to laxatives.

Dr. Kickland endorsed Dr. Geith's plan and called attention to the use of dilators in certain cases of strongly contracted sphincters. Dr. Stuver emphasized the importance of having a regular time to secure action of the bowels. Drs. Carey, Replogle and Rew also discussed the subject, calling attention to its various phases.

Adjourned.

E. STUVER, Secy.

FOREIGN JOURNALS

(Translated by Joseph Cuneo, M.D.)

A New Treatment for Epilepsy by Cervical Galvanization, by Hartenberg. (Society of Psychiatry, Jan. 18, 1912).

Dr. Hartenberg presents two patients treated by this method and cured. The technic is the following:

A positive active electrode is applied as a chain around the neck. The patient sits on the negative disc, then a continuous current of 50 to 60 milliamperes is turned on for thirty minutes. The treatment must take place every day or two days.

These observations, are interesting, and they demonstrate that, among the numerous treatments proposed for the cure of

epilepsy, galvanization deserves to occupy a place.

In the meantime it will be well to know of other similar cases, and if the patients have been radically cured.

(G. P. B. Le Progres Medical),

Disinfection of the Field of Operation and Hands of the Surgeon With Tincture of Iodine, Without Previous Washing, by Henry Fournier. (Paris Thesis, 1912).

The disinfection of the field of operation and hands of the surgeon with tincture of iodine without previous washing, or Grossich's method, constitutes a marked advance in the latest methods.

Therefore, it is the one that by all means must be used in all surgical cases of emergency, because on account of its value, it has achieved one of the first places in the great surgical methods. The antiseptic action of the tincture of iodine is to be taken in consideration (Vigliani and Zamuro). In over 237 cases of disinfection of the surgical field with the tincture of iodine, Fournier noticed only one case of suppuration; and still the cause of such suppuration is open for discussion.

This method requires the integrity of the renal filter. It should never be used in pulmonary tubercular patients.

The serious accidents that may be attributed to the method will be due to the non-observation of the two said rules.

Only freshly prepared solution must be used. The tincture of the French code of 1908 is too strong. It must be reduced to half its strength (that is, to 5 per cent) to answer the purpose.

In cases of emergency must be used a 5 per cent solution to cover the digital extremities and to dilute this solution upon the hands and forearms with a cotton pledget, saturated with ordinary grain alcohol. Then the disinfection of the hands and forearms is completed by immersion in a 1 per cent tincture of iodine.

Grossich's method is bound to render great service in gynecology and obstetrics. Its general qualities make it a precious agent in all cases of vaginal roads impossible to be disinfected by the ordinary processes: first, it is an absolutely sure preventative against obstetrical sores; the puerperal infections supervene more frequently in our days from the presence of the discharges of the vagino-vulvar canal than from the uterus; second, it assures antiseptics in case of labor, so difficult to obtain on account of the rapidity of the conditions in which we are obliged to inter-

vene; third, the particular quality of rendering dry the skin facilitates in the meantime a certain number of cases that might happen, especially version due to internal maneuvers and artificial delivery.

(M. G., *Progres Medical*.)

Action of Radium. (Uge Skrift for Læge, Copenhagen). Under the above title, writes Dr. C. E. Jensen, who has recently been studying in Wickham and Degrué's Clinic in Paris, on the therapeutic value of radium. The effect of radium is wonderful, and will become more so when surgeons and radiologists work together. Jensen says that he saw a case of cancer of the uterus, with constant hemorrhage, and the usual foul discharge, with severe pains, disappear after one exposure to radium. He had the opportunity to see the case of a young woman who had an incurable cancer, which had incapacitated her for work for 1½ years. She was treated with radium rays, which restored her health to such an extent that she was free from pain and did her housework. She was rapidly approaching dissolution when he saw her. While radium does not cure cancer, it inhibits its growth, and ameliorates suffering in a remarkable degree. Radium has a wonderful effect upon capillary varices, which disappear as by magic. The rays seem to obliterate the capillaries and destroy them, while the color disappears as if there had been no discoloration. Children which seemed doomed for life with large, unsightly birthmarks and lupus patches, would rest easy nursing their bottles, while the ray was melting away the unsightly patches. Warts and moles disappeared before its action. In skin diseases where itching was a prominent symptom, the rays gave instant relief. Young ladies with acne and chloasma were cured by a few exposures. J. L.

BOOKS

A Text-book of Practical Therapeutics. With especial reference to the application of remedial measures to disease and their employment upon a rational basis. By Hobart Amory Hare, M. D., Professor of Therapeutics and *Materia Medica* in the Jefferson Medical College of Philadelphia. Fourteenth edition, thoroughly revised. Octavo, 984 pages, with 131 engravings, and 8 full-page colored plates. Cloth, \$4.00, net. Lea & Febiger, Philadelphia and New York, 1912.

This new book of 984 pages, by Hobart A. Hare, gives to the physicians one of the most complete, useful and up-to-date works of the present time. It is divided in four parts:

The first part deals with General Therapeutical Considerations: The Modes of Action of Drugs, Direct and Indirect Action for

the Drugs, Modes of Administering Drugs, Pharmaceutical Preparations, Weights and Measures in the Metric and Apothecary's System, Dosage, Absorption of Drugs, Duration of Action of Drugs, Combination of Drugs for Joint Effect, Strength and Reliability of Drugs, Idiosyncrasy, Indications, Contraindications and Definitions, Classifications of Drugs, Incompatibility, Importance of Dietetic Treatment, Prescription Writing, Changes in the Strength of Official Tinctures in U. S. P. of 1906.

The second part is exclusively on drugs, giving their indication, dosage and therapeutic action.

Part three is devoted to remedial measures other than drugs and food for the sick.

Part four concerns diseases and their treatment, doses of medicines in the apothecaries and metric systems, ending with one

of the most valuable features, by giving an index of diseases and indicated remedies.

After a careful review of the book, we have arrived at the conclusion that it is of such value that it should be in the library of every physician.

J. C.

Digest of Comments on the Pharmacopoeia of the United States of America and on the National Formulary for the Calendar Year Ending Dec. 31, 1910, by Murray Galt Motter and Martin I. Willbert. Hygienic Laboratory Bulletin No. 84, May, 1912.

This thick volume comprises an impartial, concise and fairly complete digest of the 1910 medical and pharmaceutical papers upon the N. F. and U. S. P. and the tests, effects and uses of the products mentioned therein. It is a valuable reference book.

Infections of the Hands. A Guide to the Surgical Treatment of Acute and Chronic Suppurative Processes in the Fingers, Hand and Forearm. By Allen B. Kanavel, M. D., Assistant Professor of Surgery, Northwestern University Medical School, Chicago. Octavo, 447 pages, with 133 illustrations. Cloth, \$3.75, net. Lea & Febiger, Philadelphia and New York, 1912.

This volume is a very valuable addition to surgical literature. Infections of the hand form a considerable percentage of the work of a busy surgeon who comes in contact with the laboring class, or who may be in the service of a public hospital, and much depends upon the care which these patients receive; bungling surgery has resulted in many crippled hands. Prof. Kanavel's work along this line is well known, through his valuable articles which have appeared in *Surgery, Gynaecology and Obstetrics*.

No writer has ever gone into the subject with the thoroughness that he has. A careful perusal of the volume before us is well worth the time of every surgeon. The illustrations are all original, and show the evidence of painstaking effort on the part of the author and those who assisted him in his work.

C. B. L.

An Essay on Hashheesh—Including Observations and Experiments, by Victor Robinson. Price, fifty cents, post paid. Medical Review of Reviews, 206 Broadway, New York.

This is the work of one who knows from personal experience and observation, having taken the drug himself, and observed its action upon several friends and relatives. Much may be learned by a careful reading of this essay upon *Cannabis Indica*, that is not stated in detail in the text books. It makes very interesting reading and may be fully digested in an hour. In this way one gets all the variable manifestations of Hashheesh upon a selected

group of subjects, and is not inconvenienced by the necessity of personal experimentation.

A review of this essay will convince you that the author has covered the subject fully; also that *Cannabis Indica* as a hypnotic and sedative is not a reliable drug, and seldom produces the same results in different patients, and is variable in the same patient. There is one caution that should go with this monograph: keep it out of the hands of the neurotics.

F. A. G.

Arteriosclerosis: Etiology, Pathology, Diagnosis, Prognosis, Prophylaxis and Treatment. With a special chapter on blood pressure. By Louis M. Warfield, A. B., M. D., Assistant Superintendent and Resident Physician to Milwaukee County Hospital; Assistant Professor of Medicine, Wisconsin College of Physicians and Surgeons, Milwaukee. With an introduction by W. S. Thayer, M. D., Professor of Clinical Medicine, Johns Hopkins University. Octavo, 220 pages; illustrated with 28 engravings. Price \$2.50. St. Louis: C. V. Mosby Company, 1912.

The new and revised second edition of the only English book upon the most prevalent disease in the world, is creditable both to the author and to the publishers. It is clear and entertaining, and gives a comprehensive view of the whole subject, not omitting the latest methods of diagnosis and treatment. The chapters on blood pressure and the physiology of the circulation are particularly instructive. Dr. Warfield brings out the not always recognized fact that arteriosclerosis is frequently not accompanied by high pressure. This is a book which every general practitioner should read and keep.

E. C. H.

Tumors of the Jaws. By Charles L. Scudder, M. D., Surgeon to the Massachusetts General Hospital. Octavo of 391 pages, with 353 illustrations, 6 in colors. Philadelphia and London; W. B. Saunders Co., 1912. Cloth, \$6.00 net; half morocco, \$7.50 net.

Written in the usual clear style of Dr. Scudder's works, this volume is of especial interest to the surgeon, rhinologist and dentist.

The text is devoted to pathology, diagnosis, and treatment, all of which are thoroughly and exhaustively dealt with.

The illustrations, many of which are original and practically all new, are excellent both from the standpoint of photography and printing.

This excellent book is marred by the fact that the author has seen fit to follow the older writers to some extent in nomenclature, by using the old and obsolete term *epulis*, which should be eliminated from surgical literature.

T. E. C.

(Continued on page 207.)

UTAH SECTION

Denver Medical Times and Utah Medical Journal

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A WOMAN'S PRAYER FOR THE CHILD TO COME.

By Frank Crane.

O GOD, I am going down to find a little soul, a thing that shall be mine as no other thing in all the world has been mine.

Keep me for my child's life. Bring me through my hour strong and well for the sake of my baby.

Prepare me for real motherhood. Preserve my mind from doubts and worries and all fearsome misgivings, that I may not stain my thoughts with cowardice, for my child's sake.

Drive all angers and impurities, all low and unworthy feelings, from me, that the little mind that is forming may become a brave, clean wrestler in this world of dangers.

And, God, when the child lies in my arms, and draws his life from me, and when his eyes look up to mine to learn what this new world is like, I pledge Thee the child shall find reverence in me and no fear, truth and no shame, love strong as life and death, and no hates nor petulancies.

God, make my baby love me. I ask no endowments nor excellencies for my child, but only that the place of motherhood once given me it may never be taken from me. As long as the soul lives that I shall bring forth let there be in it one secret shrine that shall always be mother's.

Give the child a right and clear mind, and a warm, free soul.

And I promise Thee that I shall study the child, and seek to find what gifts and graces Thou hast implanted, and to develop them. I shall respect the child's personality.

I am but Thy little one, O Father. I fold my hands and put them between Thy hands, and say give me a normal baby, and make me a normal mother. Amen.

STATE MEDICAL ASSOCIATION.

The meeting at Ogden was a success. Dr. Andrew J. Hosmer of Salt Lake was elected President, Dr. R. C. Smedley being re-elected Councilor for the Second District.

Two resolutions presented by Dr. F. Clift, "A Certificate of Health Before Marriage," the other for the "Sterilization of Criminals and Defectives," were adopted, and two, "The Wilful Communication of Venereal Disease" and "Gonorrhea Cures," were referred to a special committee. It is expected that bills to carry out the object mentioned in each resolution will be introduced into the Utah Legislature next January.

THE PHYSICIAN IN POLITICS.

The time is past when the physician can stay at home and allow the political "boss" to run things in absolute disregard to medical and scientific knowledge. The physician of today has taken responsibilities on himself which he cannot now evade. The Senate Committee on Public Health and National Quarantine, an absolutely unprejudiced and independent body of men, reported to the United States Senate on the 13th of April last, *inter alia*: "Human life could be prolonged an average to our entire population of 14 years in the United States if the people were properly informed in self preservation, as was demonstrated in the report on national vitality." * * * "The pension roll, which costs the United States over \$160,000,000 annually, is three-fourths due to death and disease which was preventable." * * * "A splendid illustration of what can be done is shown in the control of yellow fever in Cuba. In 1896 yellow fever deaths in Havana, Cuba, amounted to 639 to the hundred thousand, but after the American occupation and the great discovery of James Carroll, Lazier, Walter Reed and Agrimonte the death rates fell—in 1900 to 124; in 1901 to 6; in 1902 to 0; in 1903 to 0; in 1904 to 0." * * * "Except for this discovery it would have been impossible for the United States to have built the Panama Canal, and on the Panama Canal the death rate, even in that tropical country, is not much more than one-half what it is in the United States." In proclaiming immunity against certain diseases the physician has taken great responsibilities upon himself. In the effort to abolish yellow fever and kindred diseases physicians have willingly and unselfishly sacrificed their lives. In the modification and practical doing away with small pox, diphtheria, meningitis and the summer diseases, including typhoid, the physician has proved his scientific worth to the community. He has

proclaimed to the world that science is giving up her secrets at his importunity and that many of the remaining diseases will be modified and prevented. But the League of Medical Freedom, the champion of anti-vaccinationists, anti-vivisectionists, Christian Scientists and last but not least, the patent medicine, men who declare that their "cure alls" will cure all the ills and diseases of this mortal flesh, which, forsooth, others of their bed fellows in this same league, say do not exist except in their own imaginations, assert that the physician is, whether regular, Eclectic, Homeopath or Osteopath, a fraud and incapable of preventing disease. The so-called Honorable John D. Works of California, a follower and emissary of the Christian Scientists, dared, as a Senator in the United States Senate, to assert of a body of honorable men, known as Allopaths, to his small mind, or if not small, a mind controlled by prejudice or some strong magnet of graft or otherwise, the following: "Its devotees are wholly dogmatic and intollerant. They assume that there is no other efficacious mode of healing but theirs and that all other practitioners are incompetent and a menace to the public health. * * * They are ruthlessly using that power (the A. M. A.) not to improve the practitioners of their own school only, but to coerce all people to accept their remedies and to suppress by law and persecution the practice of other means of healing. * * * The officers of the army and navy are the willing instruments of these medical men to compel American citizens to submit to be poisoned with their loathsome preparations. * * * and now these doctors want Congress to so legislate as to give them full control of the medical, the sanitary and hygienic activities and bureaus of the government that their powers may be complete. * * * Let us hope that they may soon reach that degree of intelligence that will lead them to cease the use of any drug altogether." Such a conglomerate

tion of senseless arrogance and ignorance is seldom found in a man sent to represent a great state in the halls of Congress. Political prominence has quickly used up the small modicum of "grey matter" he started out with, and the people of California will take the first and earliest opportunity of retiring the Honorable Senator to the obscurity from which he should never have been allowed to emerge. The physicians of California should get out and in their primaries "squelch" this fabricator of untruth, a typical representative of the League of Medical Freedom, aptly dubbed the League for Propagation of Disease and Christian Scientists, bodies who not only oppose the establishment of a national board of health, but also fight the pure food law, vaccination, medical inspection of schools and in some cases even antiseptic surgery itself.

There are upwards of 100,000 physicians in the United States who have practically hitherto taken no part in politics, but the time is at hand when the physician will have to take part in the war against ignorance and prejudice. He must get out and honestly seek to influence the views of his friends in the fight which is being forced upon him. This league of so-called Medical Freedom has as one of its founders B. O. Flower, president of the R. C. Flower Medicine Company from 1885 to 1899. R. C. Flower being the notorious quack and general humbug whose latest arrest was as late as 1908. Mrs. Diana Belais, a director and also a founder of this League of Darkness and Disease has appeared before the public as president of an anti-experiment society. "Here's to anti-experiment, meningitis, diphtheria and freedom!" Dr. C. S. Carr of the league's advisory board is connected with Peruna. He writes "all drugs are poison. All druggists are poisoners." Yet on the reverse page of his pseudo-medical sheet we find, "Prescribe Antikamnia and Codein tablets in la grippe, headaches, etc."

"Hurrah for freedom, Peruna and Antikamnia." For full information as to the calibre and "make up" of these so-called defenders of medical freedom we refer our readers to an editorial in our October issue, 1911, page 154. These blatant "Freedomers" would disfranchise these 100,000 scientists by a "bug-aboo" cry—the "physician in politics." Like the Athenians of old, they exclaim—"What will this babler (the scientist) say? He seemeth to be a setter forth of strange doctrines." The patent medicine "Dopers" and the absent treatment "Treaters," therefore, calling together men of like occupation said, "Sirs, ye know that by this our craft (graft) we have our wealth, but these ungodly scientists persuadeth and turneth away much people by seeking to establish a National Public Health Department and thereby prevent many diseases. The I Cure Alls, "dopers and treaters," therefore, full of wrath continued to shout, 'great is the League of Medical Freedom,' and the purse strings being loosened the District of Columbia was filled with confusion. Some, therefore, cried one thing and some another, for the more part knew not wherefore they were come together. Even our honest and simple minded senators, such as Mr. Jones of Washington, who described the Owen bill as a "trust-breeding, monopolistic, liberty-destroying, tyrannical, reactionary measure" and professed to place credence in a telegram which he read and which appears in the Congressional Record, as follows: "Vote in favor of the Owen bill means the establishment of one of the worst trusts in our country; its defeat means that we can still choose our own physician and our own medical school. We don't want any interference with our present vested rights of freedom." Really the electors of Washington should send someone not quite so child like and gullible to the United States Congress.

The physician is slowly coming to the conclusion that it is necessary for him

to abandon his former reserve. He is being hunted out of his laboratory and must for a time, at least, abandon his scientific studies to fight for freedom from disease and death, and incidentally for the freedom of the people to employ the physician of their choice and the right to know the nature and purity of the food and "dope" dished out to a credulous public. These patient medicine men in their strangle grip on politicians, senators and others have controlled certain men who "sit at table" with the President, who from being a warm hearted advocate of methods which would protect the lives of millions of our people, has "hoodoo" away his reputation as a "stalwart" by supporting Wilson and McCabe, the friends of "dopers" and has allowed the scientist Dr. Wiley to be driven from his office. The acts of Wiley and his loyal associates have proved them to be the friends of the people, but he and they were not backed by the money power and therefore went to the wall. President Taft has lost ground by acceding to those who he should know to be the enemies of Pure Food and Conservation of the Public Health. These two questions will be raised and again fought over in the next session of Congress. To the onlooker it would seem that these questions and the political party honestly espousing the cause of the right of the people to enjoy life and health will gain many friends during the coming election campaign. Dr. David Starr Jordan in a recent address in Salt Lake said: **"The establishment of a national health bureau will assist in cleaning the race and keeping down the spread of disease. * * * Issues pertaining to the national health are of far more importance to the country than the issues to be decided by the coming Presidential election."**

JOHN D. WORKS.

The Honorable John D. Works, Christian Sciercer, and husband of a Chris-

tian Sciercer, represents the State of California in the United States Senate. He may have done other things since being there, but his chief activities have been devoted to opposing the Owen Bill and in giving aid and succor to the National League for Medical Freedom under whose banner gather those opposed to the teaching that a community may protect itself against all inanimate and animate forces (including man himself) that threaten its normal length of days. We maintain that the Honorable John D. Works is by his own words convicted as being too little conversant with the facts of even popular science to be a fit subject to vote either way on the merits or demerits of such legislation as is proposed in the Owen Bill. What does his own state think of him when he says:

"A few years ago it was announced that in my state bubonic plague existed. * * * I don't know whether it did or not."

That question was fought out in California wherever men, women or children capable of seeing or hearing were gathered together. Not a school room above the grades, not a men's or women's club, not a large or small commercial body, not a trustee, supervisor, legislator or governor, not a sinner or saint but was educated voluntarily or involuntarily, by appeals to his generosity or to his meanness to know that plague did exist in California, did spread into county after county in the state and kill all too many human beings. And while vested interests and newspaper combines refused to recognize the situation because it "hurt business," democracy, which must always care for itself, went out and cleaned up the infected places. Even years before William B. Wherry proved that the persistence of plague on the west coast was associated with an infection of the ground squirrels, the boys of the countryside knew that epidemics occurred among them periodically, and that hunting and handling them was dangerous. And lest the sen-

ator think that possibilities for knowing about these things are wholly past we invite his attention to the fact that several dozen ground squirrels infected with plague were caught within the month near the centers of population in his state. But a man to whom the hysterical vagaries of a Boston woman mean more than the best thought of a thousand scientific workers for a thousand years may not appreciate the significance of even this simple fact. We have wondered in Ohio how California with its progressive ideas in no narrow sense has tolerated the senator so long, but apparently we may soon cease. Forty men interested in the establishment of that government which really exists for the people, including the lieutenant governor and a goodly number of state representatives and senators that made it possible for John D. Works to go to Washington, have telegraphed him that his political activities are not making for democratic progress and to face about, or come back home without his toga. —Editorial, *Lancet Clinic*.

THE CANAL ZONE AND THE A.M.A.

Attention has already been called in this journal to the fact that the work of members of The American Medical Association has made possible the building of the Panama Canal. By way of illustrating how important the results really are, a brief summary of figures from the October report of the Isthmian Canal Commission is given here:

According to the report, there were at work there 12,316 white employes, and 37,496 colored. Of these 12,316 white employes, 11,839 are from the United States. Among these during the month there were only two deaths, one a man aged 44 years, from chronic nephritis, and a child aged 15 months, from peritonitis. The total death rate among the white employes, of all nationalities, was 7, or 2.03 per thousand. The death rate among the thirty-eight thousand negro laborers was 12.48 per

thousand. The death rate in the United States in 1910, for all classes, was 16.1, or nearly four more per thousand than among the negro laborers at the Canal.

According to the United States Census for 1910, West Orange, N. J., has the lowest death rate, 8.5 per thousand, and Charlestown, S. C., the highest, 29.7.

In thinking of this very phenomenal sanitary victory, the physicians of Southern California must not forget that two of their public servants, Senator Works and Mr. Blight of the School Board, are actively employing their talents in a warfare upon the medical association which indirectly has made this result, as well as the digging of the Canal possible. Every physician in Southern California should exert his or her influence unceasingly until both of the gentlemen mentioned are retired to private life.—E. W., (Southern California Practitioner).

THE PUBLIC HEALTH—THE POLITICAL PRIMARIES.

Resolution in Favor of a Plank in Republican State Platform.

The political primary is only too frequently run by a few more or less disreputable ward "heelers." The time and place is kept as quiet as possible and if a few of the unterrified attend, not having caucused and being uninstructed they are without the necessary cohesion to overcome the tactics of the "boss" politician of the precinct. The special business is rushed through and the meeting adjourned before the citizen has had time to wipe his glasses. But the times are changing—progressive ideas are relegating political bossism to the scrap heap—and the people are coming into their own, and that none too soon.

At the recent Republican primary held at Layton, Utah, the question of a National Department of Public Health was introduced by a physician, an ex-president of the State Associa-

tion. It was argued that the 100,000 physicians of America were not satisfied with the Health Plank in the Chicago platform and that in the coming election many physicians and their friends (patients), irrespective of previous party attachments, would vote for the candidates of the party putting forth the best "health plank" with the best prospects of being able to carry their promises into effect. It was also argued that notwithstanding President Roosevelt in his later and President Taft in his earlier messages to Congress urged immediate legislation, the Republican Party, had, in the past six years, during four of which they were in full control, failed to carry out the planks in their platforms promising to enact legislation directed to the conservation of human health. It was also suggested that President Taft during the last two years had hauled down his colors to the patent medicine trust by accepting the resignation of Dr. Wiley and retaining Wilson and McCabe in office and that by so doing Taft had lost the confidence of those having the health of the people at heart. Inasmuch, therefore as the Chicago platform in the "23" words devoted to the subject gives no evidence of settled intent or determination to carry out the wishes of the people in this respect along the lines of the original Owen Bill, it was submitted that the vote of many Republican physicians might be retained and possibly others obtained by the Utah State Convention following the example of some of the other states and adopting a state "plank" endorsing a National Department of Health, thus binding their senators and congressmen to insist upon speedy action in Congress favoring the establishment of such a department. The following Resolution was thereupon adopted:

"Believing that a vigorous, healthy population is our greatest national asset, and that the growth, power and prosperity of these United States depends primarily upon the physical

welfare of its people and upon their protection from preventable diseases: We, the citizens of Layton, Davis County, Utah, now in primary assembled advocate the organization of all existing national public health agencies into a National Department of Public Health, under the supervision of a Director or Chief to be appointed by the President with the consent of Congress—with such powers as will give the Federal Government control over public health conditions not conserved by or belonging to the several states. And we instruct the delegates to our forthcoming State Convention to present this resolution to the Platform Committee and urge that a "plank" to this effect be inserted in our State Platform with a proviso that this National Department of Health, when created, shall have no power to regulate or interfere with the practice of Medicine or Healing."

This resolution was presented to the Republican State Convention, and the following plank is found in their platform:

"We urge the passage of more effective factory inspection laws, rigid enforcement of sanitary regulations, a systematic application of tests in weights and measures in every locality, the protection of the consumer against impure food, the establishment of a National Board of Health and the encouragement of every movement for the protection of women and children in working centers."

The physician must get out and rustle if he expects candidates for the legislature to take any stock in his teachings.

UNITED FOR HEALTH.

It was one of the curious side-lights of the National Conventions this summer that both of them were attended by lobbyists working against platform declarations in favor of protection for the public health. It is a gratification that they were not successful in frightening the Resolutions Committee either

at Chicago or at Baltimore; both platforms contain health planks. Probably they will be read amid less applause and boasted of with less unction than many other high-sounding professions of the platforms, yet no single plank in either declaration of principles is of greater importance. This, for instance, is a model statement of the grounds of a great movement which holds tremendous good:

"We affirm our previous declarations advocating the union and strengthening of the various governmental agencies relating to pure foods, quarantine, vital statistics, and human health.

Thus united, and administered without partiality to or discrimination against any school of medicine or system of healing, they would constitute a single health service, not subordinated to any commercial or financial interests, but devoted exclusively to the conservation of human life and efficiency."

The United States is not in the lead in efforts to conserve human life and promote human efficiency. We have been careless of ourselves, as we have been of our country's natural resources. We have suffered the bogies of "interference with personal freedom" and the "doctor's trust," shrewdly worked by patent medicine makers and food adulterators and a fanatical sect or two, to hold us back from united action for safe guarding the health of our people as other nations are doing. The United States was the only one among civilized nations that was unrepresented at the International Conference of Hygiene at Dresden last summer. We cannot afford to be in the rear of the enlightened movement for conserving the life and strength of our people—the very ground of all national prosperity. (Editorial—The World's Work, Sept., 1912.

POLITICS FROM THE MEDICAL STANDPOINT.

A correspondent, a physician, referring to our recent articles on "planks"

and the present political outlook from the medical point of view, says:

"Taft has surely done but little to conserve the health and Clark has seemingly taken pleasure in furthering the patent medicine interests. I am a Republican, but I cannot vote for Taft, since he has allowed the resignation of Wiley and I cannot stomach Clark and his patent medicine associates, so think that I will not vote for any candidate this year. We surely do not want four years more of McCabe and Wilson, and we do not want a man in the chair who would undoubtedly do nothing to keep the patent medicine makers within bounds."

Another:

"Now is a good time, in view of the fact that the Owen Bill is now up before Congress and the fact that the League of Medical Freedom is getting busy in the western states, with the idea of handing us a "black eye" next winter, when the various state legislatures convene. It is time for the doctor to get into practical politics and protect his rights against the "shyster," else he will get something "handed him," which will be undesirable to say the least."

Another:

"The Utah Medical Journal is establishing a name for itself in taking up matters of this sort. All of us should fight our "durndest" for Wiley and the Pure Food and Drug law, and see that it is enforced to the letter."

Another:

"I have always been a pretty good Republican, but this year 'it is different.' We have 'had it handed to us' right along by the present administration and it does not look as though there would be much of an improvement if things were to go on for another four years. They 'butchered' the Owens Bill to such an extent as to make it worthless, and I doubt if they will even pass this measure, even in its mutilated form. If the Democrats follow up their plank I believe that we will get some

good legislation, if they win November, and it rather looks as though they would. I believe that Wilson is the sort of man who will not be swerved from his convictions, as has undoubtedly been the case with Taft. While the patent medicine men have not been evident upon the surface, they have undoubtedly had much to do with the League for Medical Freedom and a good many of our Republican Senators and Congressmen have shown a tendency to favor this League, to such an extent as to make one wonder, why.

What we want, most of anything, is a square deal all around, and if it is not forthcoming from the Republicans, and it surely has not been during the past four years, I think that we should give some one else a chance to show us what they can do."

THE PHYSICIAN AND THE DRUGGIST—A QUESTION OF RIGHTS.

The dispensing doctor is again to come in for his share of troubles, unless he is very careful. For some years an endeavor has been made, through legislation, to force all doctors, regardless of their location and proximity to a retail druggist, to write prescriptions for all remedies required. Many of the bills introduced, both in state legislative bodies and the Congress of the United States, have been veiled in such a manner as to cause one to think that they were directed against the sale of habit forming drugs, but in reality, the major portion of such bills, if read between the lines, have shown that it is the dispensing doctor toward whom they are largely directed. In practically all of them it has been made a misdemeanor for a manufacturer or wholesaler to ship such drugs to other than recognized retail druggists, thus obliging the doctor to write prescriptions for all such agents. Such a law might be all right for those doctors in close proximity with a prescription druggist, but what of the hundreds, yes thous-

ands, who do not enjoy the association of such druggists, sufficiently close at hand to allow of the obtaining of such drugs promptly?

If such bills became laws the doctor would be unable to obtain practically any of the antispasmodics, and in consequence he would be practically unable to practice his profession, in that it is a recognized fact that this class of drugs are very frequently in demand, and when properly employed in the face of certain indications, bring about results, obtainable in no other way.

It has been contended by some of those interested in prevailing upon the doctor to write prescriptions for all of his wants, that he is not sufficiently well posted in pharmacy to properly compound his prescriptions and that he should, in every instance, call upon the druggist for assistance. What of our western doctors, many of whom are called to points far removed from any settlement, say nothing of a prescription druggist? What of those who live in settlements far removed from the centers of commerce and where it is out of the question for one to maintain a retail pharmacy, because of lack of trade? Must they come under the jurisdiction of a law which says that all doctors must virtually write prescriptions for all of their drug wants, and that manufacturers and jobbers must not ship them this certain class of habit forming drugs? Who would suffer through such legislation? The doctor would suffer somewhat, as he would not be able to practice in a proper manner, but the real sufferer would be the patient, as the doctor would have nothing at hand with which to relieve his sufferings.

We do not argue that the doctor should be in continual combat with the druggist, but he should contend for his rights, and such contentions should be sufficiently strong as to be heard by those who would frame the laws of the state and country at large. Every doctor, in every state in the Union, should

see to it that those elected as legislators should be placed under strict promise to promote no legislation of such rank class. Legislation against the general sale of habit forming drugs is good at all times, providing it is legitimate in character and does not act against a certain class of men, or in favor of another class, and such legislation, we feel sure, would meet with the hearty approval of every doctor in the country, but when a law is made to read that none but prescription druggists may obtain such drugs it becomes a different matter, and every doctor, for his own self-preservation, should oppose the introduction and passage of any such bill.

That such a bill will undoubtedly be introduced in practically every state legislature and in Congress during the coming session, is very probable, and the doctors should see to it that such a measure should be promptly killed. No such measure should even come to the matter of first reading, but should it reach that point force should be brought to bear to kill it in committee, in that it be not reported either for passage or the reverse.

It is very probable that such a bill would be declared unconstitutional by the courts, but nevertheless it should not reach a point where it could be placed in the hands of such a body for any consideration, whatsoever.

If a bill of this sort were to become a law it would act as an opening wedge and allow of still other laws being made which would farther interfere with the rights and privileges of the dispensing doctor, and this is all the greater reason why the doctor should busy himself in seeing that this primary invasion of his rights be not accomplished. Not a single candidate, either for office in the state or national legislative body, but whom is beholden to one or more doctors within his district, and every doctor should see to it, prior to the election of such men, that they be placed under pledge to enter into

the passage of no such distinctly class legislation.

The time has arrived when it is necessary for the medical profession to maintain a lobby in every state as well as in the national capitol, in that the rights of the doctor may be preserved. The doctor has never asked anything inordinate from any legislative body; in fact, the major portion of the bills either fostered or introduced by the profession, have been with the idea of conserving the general health of the people as a whole, and not with any idea of favoring greater prosperity of the doctors themselves. All the doctors ask is that they be given a square deal in all things and that their individual, legitimate rights and privileges be not interfered with, especially in the furthering of the interests of some other particular class.

Let the doctors all over the country get busy at once and see that men, favorable to their legitimate interests, be elected as legislators, both state and national, and that thereafter, they likewise see that such men are held to their pre-election promises in every instance. This is not a matter for simple passing notice, but one of the greatest importance, as the passage of the one bill, relative to habit forming drugs will work a great hardship on a vast majority of the profession. —Servoss.

CERTIFICATES OF HEALTH, MINISTERS AND MARRIAGE.

The stand taken recently by a minister in Chicago, who declared he would henceforth demand a certificate of health from a reputable physician before he would perform the marriage ceremony, should open the way for a crusade that could do an immense amount of good.

We all realize full well the difficulty of attempts at passing legal measures to demand a certificate of health before marriage, and yet we know equally well the necessity of some such measure to

lessen the innocent suffering and disease of unsuspecting brides. The trouble with legal measures is to find rules that would determine who is "fit" and who is "unfit." The wide degree of latitude offered physicians and ministers would be the commendable feature of such a plan as the one suggested. Those in good health would no more mind the examination than they would the one demanded by insurance companies. Only the diseased could object and it would probably make them more careful than they are at present.

While the deterrent effect might not be as great as desired, the educational feature would more than make up for any other shortcomings the method might have. Mothers, fathers, brides and grooms would all concern themselves as to "fitness" and good health and would soon realize certain dangers that are not now dreamed of.

While many would avail themselves of justices of the peace, the evasion of the medical examination would soon arouse suspicion and make such marriages unpopular. The cities and states could well afford to provide means whereby those unable to pay for an examination could have it done by the regular city or county physicians. No reasonable person could say that the romance of marriage would be affected by such a certificate demanded for all. It would not cast a reflection upon either party. If the physicians of the country, who realize more fully than any other class of citizens the need of premarital certificates of health would urge the ministers to make such a demand, we would soon have a state of affairs far better than legal measures could ever provide.—Editorial Journal Record of Medicine.

DEPARTMENT OF EUGENICS

"A vicious timber wolf is taken from his haunts and placed in captivity. He is mated with a certain species of dog. The offspring is a gentle, affectionate, hairless, Spanish lap dog, whose eyes pop out if you squeeze its tail. Human blood intermingles more readily. Were the vein of an honest man opened and his blood fused with that of a politician, it is probable that the experiment would have the effect of making the politician honest, at least his offspring.

"Burbank has wrought wonderful improvements in plant life, and the human race is not to be excepted from fundamental rules. The scientific mating of man and woman at the expense of sentimental tradition would produce superior children, mentally and physically, but such mating must in time eliminate the most vital elements in human evolution—love and initiative. Love is the best basis for marriage, and love is a very real and noble thing in spite of the baseness of its many imitations.

"The value of eugenic study is in the diffusion of sound ideas of life and parenthood. Government can do something by refusing parenthood to those who cannot care for themselves because of feeble-mindedness, disease and vice, but legislation must be undertaken very cautiously, giving the individual the benefit of all doubt. Government should not go beyond public opinion, which in turn should be controlled by science."—Dr. David Starr Jordan in a recent address before the Salt Lake Teachers' Institute.

OREGON — STERILIZATION LAW UPHOLD.

The constitutionality of the law providing for the sterilization of habitual criminals and those guilty of unnatural crimes was upheld by the Supreme Court of Oregon, September 3. In sustaining the sentence imposed on Peter Fielen of Seattle, who also is under sentence for life imprisonment. The court found that medical authorities agreed that the operation was neither dangerous nor painful, and held that such punishment was not cruel nor in-

human. The case was the first of its kind to come before the supreme court of the state.

INDIANA—CERTIFICATE OF HEALTH LAW.

Dr. J. N. Hurty of the Indiana State Board of Health has kindly favored us with a copy of a Bill passed by the Indiana House, but caught in the Senate maelstrom during the last hours of the Session. He adds: "We shall surely get it passed, or one like it, in 1913."

Section 1. Be it enacted by the General Assembly of the State of Indiana that it shall be unlawful for County Clerks to issue a license to marry to any male who fails to present a medical certificate showing him to be free from all venereal diseases, said certificate to be sworn to by a licensed physician and to be filed with the usual application for license to marry.

Section 2. The certificate required in Section 1 shall read as follows, to-wit:

I,, being a legally licensed physician, do certify that I have carefully and thoroughly examined having applied the recognized clinical and laboratory tests of scientific medicine, and find him to be free from all symptoms and taint of venereal disease."

PRACTICAL EUGENICS.

J. N. HURTY, M.D.,

State Health Commissioner, Indianapolis, Indiana.

Victor Hugo has said, "The time will come when, looking back over the thorny path trodden through the centuries, mankind will say, 'What! We had slaves? What? We had kings?'" And is it a far cry, in the light we now have, to say the time will come when mankind will exclaim: What! We had criminals? What! We had insane? What! We had idiots? What! We had the hereditary lame, halt and blind, and the money-mad predatory rich," It is now known that very probably fifty per cent of insanity is hereditary, about twenty per cent caused by alcohol, about twenty per cent by syphilis, and about ten per cent by other causes. Counting ten per cent as unpreventable even under a very high state of understanding coupled with practical action, the ninety per cent is preventable. And, is it not food for thought to know that the rational control of procreation would directly prevent fifty of the ninety per cent and would indirectly prevent the remaining forty. I say indirectly prevent, because eugenics would surely produce a race which would be in such close harmony with its environment as not to use and suffer from alcohol, and not to sin and have syphilis. As to insanity, let us remember at the beginning that the science of medicine must be credited with having discovered that it is a physical ill and not a possession of the devil. And that because of this discovery mankind abandoned its cruel and inhuman treatment of the insane and in its stead adopted kindness, patience and charity. In this instance, religious teachings, through centuries, was not sufficient to develop these virtues, but when we knew and understood then they were.

It is medicine, too, in the person of Dr. Francis Galton, which has pointed out the possibility of making man mentally, morally and physically more perfect through the scientific control of heredity. And, again, it is medicine which proposes, through medical inspection of children and the early discovery and correction of hereditary and acquired physical defects, to do a great work in strengthening the physique, the mind and the morals of mankind.

Railroad officials discovered a few years ago that many employees were color blind. They could not distinguish a green light from a red one, or a blue one; and scientific examination proved that about eight per cent of these public servants were absolutely color blind. And so it is with a large portion of the defective and criminal classes. They are born morally color blind; they can make no distinction whatever between right and wrong; between truth and falsehood; so that when we come to study the relationship between crime, insanity and imbecility, we find them much of a kind and the field is indeed most melancholy. An examination of the letters received by the inmates of prisons from their relatives and friends, show they come from other prisons or from institutions for defectives. Fully a third of prisoners have had a fallen brother, sister, daughter, mother or some immediate relative in a charitable or penal institution. Dr. Oliver Wendell Holmes speaks of "border liners," by which he means those afflicted with hysteria, epilepsy, chronic neuralgia, chorea, cataplexy, the introspective, the drunken, the melancholy. Their kinship is found to be very close, they all need the care of medicine and the state. They are not infrequently found in family groups. One will be a thief or a drunkard, one will be insane or idiotic, one will have epilepsy, another chorea, or maybe one or two will exhibit only a morbid self-consciousness or more or less excentricity. It is as impossible to make them sound and well as to replace a destroyed eye: These defectives may be quite well educated or their surroundings and conditions in life be conducive to wholesomeness, but there they are, simply defectives, and neither prayer nor science can do more than ameliorate their condition. A border liner may be kind-hearted, kindly disposed, but with negative qualities. He cannot say no. No power can make him reliable. At one time it was thought that many, if not all, degenerates and defectives could be made into reliable citizens through religious conversion, but alas, it failed utterly. Now, at last, we realize that the human race is to be improved by

[Read before the Ohio State Medical Association.]

applying exactly the same laws to man that have developed the lower animals. A child gave her parents much trouble on account of her violent temper. She did not learn to walk well until rather late in childhood, and at ten had thick speech. The father thought she must have something the matter with her tongue or throat. A few moments' examination made plain to the physician these symptoms were the stigmata of imbecility. The parents were highly indignant when the truth was told and in anger dismissed the doctor. The girl, now a woman, is the mother of three imbecile children, all in the feeble-minded institution. And it is thus that society is burdened with the unfit. We bear the burden willingly, but not always intelligently. Its extent is not generally comprehended, the underlying causes are not generally understood. Of the three prominent neurotic diseases, namely, insanity, epilepsy and feeble-mindedness, we find the first principally a disease of adult life manifesting itself in the great majority of instances before twenty-one years of age. The last, feeble-mindedness, generally exists from birth. Feeble-mindedness, imbecility and idiocy are simply varying degrees of arrested development and development is arrested simply because its limit has been reached. If the business man, who is in the saddle, and who runs things, could realize the vice, crime, misery, suffering and the heavy burden of taxation caused by feeble-mindedness; and then could realize that hygiene knew how to prevent it all; false sentiment and prudery would depart in a hurry, and practical science would have its beneficent way.

The feeble-minded regard marriage vows very lightly, frequently paying no attention at all to them, not understanding the situation. Their increasing number is apparent in our statistics and the expense of maintenance grows annually. Each feeble-minded person who lives, will almost certainly produce his kind and may bring blight and disease into blood of normal character. I sat in the gallery of the great hall of one of Indiana's insane institutions, and with the superintendent watched the inmates solemnly walk through square dances. A young man at the piano attracted my attention on account of his firm touch and excellent execution. "He is an inmate," said the superintendent. He can play the music of the great composers quite well and has composed several good waltzes. He is a graduate of one of our minor colleges, yet he is an imbecile and now suffers from impulsive insanity. A strong attendant sits at his side ever watchful to restrain him." "What is his heredity?" I asked. "That is the point," was the reply, "His mother is feeble-minded and passes as a neurasthenic in her neighborhood; and his father died in the Central Insane Hospital. He has a sister in the idiot asylum." How easy it would have been under

a wise government to have practically applied hygiene to the grand-father when in childhood he most certainly exhibited the stigmata of degeneracy, and so have prevented the birth of the degenerate mother and of her two degenerate children. It is certainly useless, unnecessary, cruel, bad every way, to permit the procreation of the unfit and then bear ourselves to the earth with a burden of taxation to care for them. We have had almost two thousand years of Christianity; and in that time there has been ceaseless inculcation of religion and morals, and still the scarlet woman, social diseases, imbecility, insanity and crime exist. Wars are still going on, in which the young, healthy, normal men are slaughtered. The monastery and the nunnery still claim a no insignificant number of the healthy and the gifted, and the cripples, the imbeciles, the diseased, the vicious, are left free to multiply.

In Indiana a start has been made to stop at least a part of this foolishness, and while progress has been and will be slow, still the beginning has been made. But let me give that story later.

In concluding the chapter on "Race Improvement" in his memoirs, Dr. Galton says: "Charity refers to the individual; statesmanship to the nation; eugenics cares for both. I take eugenics very seriously, feeling that its principals ought to become one of the dominant motives in a civilized nation, much as if they were one of its religious tenets. Individuals appear to me as partial detachments from the infinite ocean of being, and the world as a stage on which evolution takes place, principally hitherto by means of national selection which achieves the good of the whole with scant regard to that of the individual. Man is gifted with pity and other kindly feelings; he has also the power of preventing many kinds of suffering. I conceive it to fall well within his province to replace natural selection by other processes that are more merciful and not less effective. This is precisely the aim of eugenics. Its first object is to check the birthrate of the unfit, instead of allowing them to come into being, though doomed in large numbers to perish prematurely. The second object is the improvement of the race by furthering the productivity of the fit by early marriages and healthful rearing of their children. Natural selection rests upon excessive production and wholesale destruction; eugenics on bringing no more individuals into the world than can be properly cared for, and those only of the best stock."

I remember hearing in boyhood a lecture upon education in which the speaker eloquently contended that universal education would improve the race, would decrease crime and increase morality. No one contradicted him, and I think all present accepted the full dictum. But what havoc has been made of this theory by experi-

ence? Then we did not know that acquired characters were not transmitted, and in our darkness believed education would prove a cure-all for the ills of society. Now we know that only natural characters, good and bad, are transmitted, and that education and training, no matter how extensive and thorough, has not the least effect upon germplasm to modify its power to transmit other than innate characters. We recognize two ways already quoted from Galton, differing widely from each other, in which race improvement may take place. The first is the biological progress or evolution which from generation to generation brings changes into the intrinsic character of men. The second is social progress which is to a large degree independent of individuals and is a change in what men "have, know and do." Little intrinsic gain is observable by comparing the highest and best tribal stocks of the present day with those of two or even three thousand years ago, but we are astounded when we observe the social gain Civilization, in the sense of increase in the bounties of life and in scientific knowledge goes onward by leaps and bounds, and this is to be expected when we observe the marked power of man to acquire, and to pass onward what he acquires. However, in comparing our statesmen, philosophers and artists with those of ancient Greece and Rome we observe no marked advancement except perhaps in practical altruism. In biological evolution heredity constantly interferes on the side opposed to change. Eugenics involves the question, Is it possible to secure the generations unborn on innate physical, moral and mental nature, superior to preceding generations? This question is to be answered through the study of life factors controlling not animal evolution only, but human evolution. For, while physical evolution, of the lower animals is easily controlled by breeding and their mental evolution to very slight degree, their moral development cannot be affected, as they have no moral sense. Although the laws of heredity are chiefly dealt with by eugenics, it must consider also problems of environment and nurture. Artificial selection and surgery cannot alone solve the problem. We must endeavor, therefore, to bring into harmony biological and social evolution, the two great methods of progress; selecting the helpful ways of both, carefully eliminating those which hinder.

That eugenists for practical results must co-operate with workers for social and institutional progress, plainly appears from the following utterance of Francis Galton. He says:

"Eugenic belief extends the function of philanthropy to future generations. It renders its actions more prevailing than heretofore by dealing with families and societies in their entirety, and it enforces the importance of the marriage covenant, by directing serious attention to the probable

quality of future offspring. It strongly forbids all forms of sentimental charity that are harmful to the race, while it greatly seeks opportunity for acts of personal kindness as some equivalent to the loss of what it forbids. It brings the tie of kinship into prominence and strongly encourages love of family and race. In brief, eugenics is a virile creed, full of hope, and appealing to many of the noblest feelings of our nature."

To practically apply eugenics is but a step forward. Man early utilized the forces of heredity in the culture of plants and animals, and his achievements in this direction, from the prehistoric domestication of animals to the great successes of our modern breeders, have been amazing. From Plato onward, various projects for the deliberate improvement of the human stock have been proposed, but we have not yet arrived. And, now that the way is quite clear, we hesitate, though acknowledging that the ways of the costly courts only suppress crime, not in the least curing it. We cannot rationally hope at the present time, that extensive breeding from the best will improve human stock to any appreciable degree. Superior women cannot be made the ancestresses of the race, for superior women are not existent in large numbers, and at the best a mother can bear and do justice to but few children. And, again, it would be impossible to resort to some polygamous device in order to utilize fully the men of best type as fathers. We therefore, at least for the present, are limited to prevention of breeding from the worst. To this proposition the popular consent is given for certain classes, such as rapists; and to a degree for confirmed criminals, but when proposed for eliminating the hereditary insane, and idiot, the hereditary pauper and hereditary vicious and deformed, popular consent will be hard to gain. But it will come with understanding. We, therefore, reach solid ground when we consider the prevention of breeding from the very worst. A definite beginning of such prevention was first begun in Indiana ten years ago without law, and, most strange to say, by the consent of the unfit persons themselves.

In 1905 a law was passed making sterilization under circumstances despite the criminal's opposition. This law is short and reads as follows:

"Whereas, Heredity plays a most important part in the transmission of crime, idiocy and imbecility;

"Therefore, Be it enacted by the General Assembly of the State of Indiana, That on and after the passage of this act it shall be compulsory for each and every institution in the state, entrusted with the care of confirmed criminals, idiots, rapists and imbeciles, to appoint upon its staff, in addition to the regular institutional physician, two (2) skilled surgeons of recognized ability, whose duty it shall be, in conjunction with the chief physician of the institution, to examine the mental and physi-

cal condition of such inmates as are recommended by the institutional physician and board of managers. If, in the judgment of this committee of experts and the board of managers procreation is advisable, and there is no probability of improvement of the mental condition of the inmate, it shall be lawful for the surgeons to perform such operation for the prevention of procreation as shall be decided safest and most effective. But this operation shall not be performed except in cases that have been pronounced unimprovable."

Vasectomy is the method usually chosen for sterilizing, yet it will be observed any method, even asexualization, is permitted in the law. Vasectomy is simple, scarcely more serious than vaccination, is without the slightest danger, is not attended with mutilation and may be performed in three minutes without a general anesthetic. The patient spends not one minute in bed, but immediately goes about his duties. Since October, 1899, when Dr. H. C. Sharp, surgeon of the Indiana Reformatory at Jeffersonville, performed his first vasectomy, fully five hundred such operations have been done. Prior to the going into effect of the law all the patients submitted voluntarily. This submission is usually coincident with the arrival of the religious stage in the prisoner's life. At the time of incarceration most prisoners are inclined to resist prison discipline and are bitter against society. Within a longer or shorter period they generally reach the religious stage and are then more easily managed. They are no longer gloomily taciturn and set against the world, but are frequently eagerly receptive of instruction and very amenable to discipline, but backsliding from this state of mind is sure to occur sooner or later. They are told that parenthood only will be denied them and that their mental and nervous condition, usually disturbed, will greatly improve. They almost always assent, as they do not want to be parents, and welcome sterility. Within a few months a marked difference occurs in the general attitude and appearance of the man. He sleeps better, he increases in weight, is more cheerful, the mind is brighter, he willingly obeys the rules and in all ways a better man appears. Of course, degeneracy is not cured by vasectomy, its perpetuation only, is prevented. I know a man who was born with two thumbs on each hand. This defect was hereditary, for one uncle and his great-grandmother had it. At twenty years of age he had the extra members amputated, being driven to it through anguish and mortification. When told that he would likely transmit the deformity if he became a parent, he thereupon vowed celibacy. In private he has told me he would rather die than be a father of a child with even the slightest defect. At a certain college in Indiana I met a young man of twenty-two who had a club foot and whose education had been delayed by poverty. He was very serious in his manner, at times

almost melancholy, but of bright mind and easily led his class. He confessed to me that he had several times contemplated suicide because of his deformity. "No whole person can know," said he, "the mental torture suffered by those who are deformed. I have gone to the cellar, the attic, and the barn, and cried by the hour over my misfortune. I have cursed my parents for bringing me into the world and have sworn never to marry." His distress of mind and suffering was very considerable. I learned he had shown some attentions to a young woman who had not repelled him, but he had suddenly dropped her and the matter was a subject of remark among his school fellows. I made inquiries and after a short acquaintance resolved to tell him he could have a home and no fear of perpetuating his deformity. He accepted, and now he has a home with its increase of happiness in his life. He and his wife are content and both bless the good which science brings to mankind.

Indiana's other eugenic law was passed in 1905 and commands that:

"No license to marry shall be issued except upon written and verified application. Such application shall contain a statement of the full christian and surname, color, occupation, birthplace, residence and ages of the parties, whether the marriage contemplated in the first, second or other marriage, together with the full christian and surnames, residence, color, occupation and birthplace of their parents, including the maiden name of the mother, together with such other facts as may be necessary to determine whether any legal impediment to the proposed marriage exists.

"Applications for license to marry shall be uniform throughout the state and it is hereby made the duty of the State Board of Health to furnish a form therefore to the several clerks at once upon the approval of this act: Provided, That said State Board of Health may revise said forms so furnished from time to time as may be advisable."

The law further commands:

"No license to marry shall be issued where either of the contracting parties is an imbecile, epileptic, of unsound mind or under guardianship as a person of unsound mind, nor to any male person who is or has been within five years an inmate of any county asylum or home for indigent persons, unless it satisfactorily appears that the cause of such condition has been removed and that such male applicant is able to support a family and likely to so continue, nor shall any license issue when either of the contracting parties is afflicted with a transmissible disease, or at the time of making application is under the influence of an intoxicating liquor or narcotic drug.

"In those cases when the right to a license is not made to appear the clerk shall refuse to issue the same. At once upon such refusal he shall certify the pro-

ceedings to the circuit court without formality or expense to the applicants, who shall be notified by him of such action. Such application shall thereupon be at the earliest practicable time heard by the circuit judge without a jury in court or in chambers during the term or in vacation as the case may be, and his finding that a license ought to issue or ought not to issue shall be final and the clerk shall act in accordance therewith the true intent of this section being to secure for the applicants a hearing by said judge without affirmative action by said applicants, and to give notice to them of such hearing, its time and place, without delay or expense.

"If persons resident of this state with intent to evade the provisions of Section 1 and Section 3 go into another state and there have their marriage solemnized with the intention of afterward returning and residing in this state, and do so return and reside in this state, such marriage shall be void, and such parties, upon returning to this state, shall be subjected to all the penalties provided for in this act: Provided, This section shall not apply to persons who in good faith become or are citizens of any other state."

"Whoever procures the issuance of a license to marry by any false statement, representation or pretense shall be fined in any sum not exceeding five hundred dollars."

"Whoever being duly authorized to solemnize marriage in this state knowingly joins in marriage persons who have not complied with the statute relative to the procurement of marriage license shall be fined in any sum not exceeding five hundred dollars."

"Every clerk of the circuit court who shall issue any license contrary to the provisions of this act shall be fined in any sum not less than twenty-five dollars nor more than one hundred dollars."

As commanded, the State Board of Health prepared the appended blank forms of application for license to marry.

At first there was manifest some opposition, and in instances very harsh statements were made, but finally this all died out, and now not the slightest opposition appears. The highest court has upheld the law in the case of a very rich and prominent man who was luetic and knew it, who was refused a license to marry. He thereupon went to Kentucky and was married and upon return to Indiana, in due time, the marriage was declared null and void. So, if people with certain hereditary diseases get married in other states to avoid Indiana's statute, they must remain out of the state or suffer the penalty.

As the enforcement of the law depends upon the county clerks, all new ones are sent a special letter from the State Board of Health, which gives the argument for the law, and makes plain the benefits its rigid enforcement will bring to the state. Of course, this is to educate and to arouse the interest of new officials. We have not

sufficient data for conclusions, but it is true licenses to marry are denied daily in the state to those who should not marry; and, although marriage is not necessary for procreation, still it is certain the law has done something toward the end at which it is aimed.

As to the sterilization law: It is plain it is not perfect, that it can be severely criticised, but it is a start in the line of work which must be done, and it has certainly made procreation impossible in scores of persons who were unfit to have progeny.

APPLICATION FOR MARRIAGE— FEMALE.

Application is hereby made for a license for the marriage of — to — upon the following statement of fact relative to said parties: 1. The full Christian and surname of the woman is —. 2. Color —. 3. Where born —. 4. When born —. 5. Present residence —. 6. Present occupation —. 7. Full Christian and surname of father —. 8. His color —. 9. His birthplace —. 10. His occupation —. 11. His residence —. 12. Full Christian and maiden name of mother —. 13. Her color —. 14. Her occupation —. 15. Her birthplace —. 16. Her residence —. 17. Has the female contracting party been an inmate of any county asylum or home for indigent persons within the last five years? —. 18. Is this her first marriage? —. 19. If not, how often has she been married? —. 20. Has such prior marriage, or marriages, been dissolved? —. 21. If so, how and when? —. 22. Is the female contracting party afflicted with epilepsy, tuberculosis, venereal or any other contagious or transmissible disease? —. 23. Is she an imbecile, feeble-minded, idiotic or insane, or is she under guardianship as a person of unsound mind? —. Signature of applicant —.

Affidavit follows here.

APPLICATION FOR MARRIAGE LICENSE —MALE.

Application is hereby made for a license for the marriage of — to — upon the following statement of fact relative to said parties: 1. The full Christian and surname of the man is —. 2. Color —. 3. Where born —. 4. When born —. 5. Present residence —. 6. Present occupation —. 7. If no occupation, what means has the male contracting party to support a family? —. 8. Is the male contracting party of nearer blood kin to the female contracting party than second cousin? —. 9. Full Christian and surname of father —. 10. His color —. 11. His birthplace —. 12. His occupation —. 13. His residence —. 14. Full Christian and maiden name of mother —. 15. Her color —. 16. Her occupation —. 17. Her birthplace —. 18. Her residence —. 19. Has the male contracting party been an inmate of any county asylum or home for indigent

persons within the last five years? —. 20. If so, is he now able to support a family and likely to so continue? —. 21. Is this his first marriage? —. 22. If not, how often has he been married? —. 23. Has such prior marriage, or marriages, been dissolved? —. 24. If so, how? —. 25. When? —. 26. Is the male contracting party afflicted with epilepsy, tuberculosis, venereal, or any other contagious or transmissible disease? —. 27. Is he an imbecile, feeble-minded, idiotic or insane, or is he under guardianship as a person of unsound mind? —. Signature of applicant —.

Affidavit follows here.

DISCUSSION.

Dr. McClellan: Indiana deserves great credit in that she has taken the initiative in this new and very vital field of public hygiene. Our State Society, through its Legislative Committee, is committed to the support of a similar law now pending in the present General Assembly.

The conditions due to the perpetuation, by procreation, of the defective classes in our commonwealth, is discreditable to the intelligence of our people and a menace to our general welfare. This law should be placed on our statute books. If it fails of passage at the hands of the present Legislature, then the agitation should be carried on with vigor before every potential organization interested in the welfare of our race. The economic problem involved therein should be put up to the great cor-

porations and institutions that bear the burden of taxation, especially boards of trade, insurance companies, and similar bodies.

The social problem should be brought before influential women's clubs and the great leading fraternal organizations.

The moral problems should be brought before the great church bodies, Y. M. C. A. and Y. W. C. A.

It amounts to sacrilege for a minister to ask the blessing of God upon a marriage wherein one or both of the contracting parties is a physical or a moral degenerate.

As to the operation to choose in bringing about the desired sterilization, undoubtedly thy one described in the excellent paper is the one of choice, although for certain particularly heinous crimes the operation of castration would seem almost advisable.

Dr. Silver: My attention was first called to the subject of vasectomy */* receiving a circular issued by a society in the city of Chicago formed for the purpose of propagating the idea. I had not heard of the work of Dr. Sharp in Indiana, but I was impressed with the value of the procedure in protecting society and was quite ready to give it endorsement. The committee on legislation drafted a bill, and I trust if the Ohio Legislature ever gets in the right frame of mind we shall have it enacted into a law.

I am in full sympathy with everything expressed in this paper. We ought to have a society formed for the purpose of propagating this doctrine for the protection of the race, in every city, village, and rural district.—Ohio State Medical Journal.

NO MARRIAGE LICENSE WITHOUT A PHYSICIAN'S CERTIFICATE OF FREEDOM FROM VENEREAL AND MENTAL DISEASE.*

By William J. Robinson, M.D.,
New York City.

Editor of The Critic and Guide, and of The American Journal of Urology; Author of "Sexual Problems of Today" and of "Never-Told Tales;" President of the American Society of Medical Sociology.

We are living in an interesting age. It may not be a great age, it may not be fruitful of grand new ideas, but it is an interesting lively age. Everything is in a ferment. Everything is being questioned. Nothing is taken for granted. And while much of what is passing for new is crude, silly, and reactionary; while much of what is passing for original and virile is really old and moldy and decaying; still, out of it all will come something beautiful, something grand and wonderful. And, needless to say, among the most wonderful phenomena of the present age is the spirit of unrest among the female members of the human race.

Whether or not woman suffrage will prove the panacea that its adherents believe

it will, or whether its universal granting will put progress back half a century, as others believe it will—one thing is sure; woman refuses to remain the doll, the child, the slave that man wanted to make of her; woman is awake—if not fully awake, she is opening her eyes, anyway. And she demands the right to dispose of her body as of her own and not as her husband's property. She wants to know what is to become of her body when she enters the bonds of holy matrimony, for she has heard that not all is well in that sacred kingdom, in that ardently desired-for paradise. She has heard some of her women friends cursing instead of blessing the day when they changed their maiden name for that of their future husband. And they are begin-

*Address delivered before the Harlem Liberal Alliance, New York, March 1, 1912.
First published in Clinical Medicine.

ning to ask for particulars, for details. And well it is that they are doing so.

For too many years, for too many centuries woman has been outraged, infected, sickened, invalidated, incapacitated for life and often driven to an early grave by the man who promised to love, cherish, and protect her. Very often he did this in sheer ignorance—he didn't think he could infect anybody, he thought he was perfectly cured, or he forgot all about having had a disease—"It was so long ago." Sometimes he did it with perfect knowledge of the possible consequences and in spite of the distinct warning of the physician. He married in the dangerous, infectious stage because he wanted the woman's money, or it was inconvenient to delay the wedding, or for some other real or pretended reason. But whether infected through the husband's ignorance, through his carelessness or through maliciousness, the disastrous result was always the same; and woman is getting "foolish" enough to refuse to continue to be a victim of man's ignorance and brutality. She begins to object to being infected a day or a week or a month after the wedding. She is beginning to ask—or we are beginning to ask for her, for the liberation of the slave never came through the slaves themselves, but through the fighters for liberty, through the humanitarians—some guarantee that the marriage-bed will not soon be converted into an invalid-bed, that the wedding march will not be a prelude to an early funeral march.

Before going further, let me give you the histories of a few cases illustrating the infection of brides by their husbands:

Case 1. Twenty-two years old. Married three years and two months. Exactly one month after the wedding—she remembered the happy day—she began to feel pain and burning in the vagina, pain on urination, and other symptoms. She has been treating with different doctors ever since. She will never get well without an operation, because both tubes are swollen, distended, and full of pus. And if she has the tubes removed, she will of course never have any children. It may also be necessary to remove her ovaries.

Case 2. Age nineteen. Married two months. She must have become infected on the very wedding night, for ten days after the wedding ceremony all the symptoms of an acute gonorrhea were in full blast. Fortunately the husband was well-to-do, she could afford almost daily treatment at the office, the home part of the treatment was carried out by a competent trained nurse, and in three months she was well. But it cost her a lot of pain and suffering, and a pile of money; the poor can afford the former, but not the latter. How soon she will be able to have a child is also a question.

Case 3. Age twenty-eight. Married five years. Began to ail about two weeks after marriage and has been an invalid ever since. All that time she has had no treatment.

For the husband happens to a cruel, contemptible brute. He told her that she did not need any treatment, it was natural for a woman to be sick after marriage, and it was no use wasting money on doctors. But finally she became so haggard-looking, got so thin and feeble that her people insisted on her consulting a doctor, and a friend advised her to see me. She came with her husband. Of course it did not take me long to find out what the trouble was.

I asked for a private talk with the man, who at first strenuously denied ever having had any venereal disease; but when I told him that it was no use lying, that I could find out in a minute by examining his urine or prostatic secretion whether he had or not, he confessed that he had had gonorrhea, but he was sure that he had been cured when he married. I examined his urine and found it full of shreds and gonococci. When I told him that it was a crime to ruin a human being like that, without even trying to cure her, his excuse was that he was afraid to send her to doctors; he was afraid they would tell her what the disease was, and as his and her parents were strict Catholics, he feared there might be trouble. And so, for the fear of a little unpleasantness, he risked and ruined the life of the woman whom he promised to cherish and protect. For she will never again be a healthy, normal human being. Her entire generative organs—the uterus, the ovaries, and the fallopian tubes—must come out, if an attempt is to be made to save her life. And she may not be able to endure an operation—so weak, so anemic, so miserable is she.

And strange as it may seem, almost up to within a month before her coming to me she had no suspicion that her husband had anything to do with her trouble. So she told me, and I fully believe her. I know of instances where the woman ailed and suffered for ten, fifteen, twenty years, and some even went to their graves without suspecting that their lovely husbands were in any way responsible for their horrible condition. And she might still be unaware of the cause of her condition if a friend of hers who had heard me lecture and read some of my books and editorials had not given her a hint. Her suspicion soon grew to a certainty; and I do not believe that her feeling for her husband now is one of pure, unalloyed love.

It is interesting to spend a minute or two in a consideration of the feelings of the infected wives toward their husbands. I used to be surprised to notice the good-natured, forgiving attitude, toward their husbands, of wives who had undergone years of suffering because of these husbands. But I no longer am surprised—for I see it so often. Not a grudge, not a resentment. But this only in cases where the husband was kind and comradely to the wife, made a clean breast of things, and did everything within his financial power to cure her. Such was true in the cases num-

ber one and two. The husband in case number three was just the opposite—he was a low, contemptible brute—of whom we have not a few—and his wife, on finding out the true state of affairs, did not hesitate long in making him know her true feelings.

Case 4. Age twenty-eight. Married four years. Three months ago she gave birth to a child, after a very difficult labor. The child was afflicted with ophthalmia neonatorum and is now completely blind in one eye. Only after the greatest care and attention was the other eye saved. Since giving birth to the child, she has been a very sick woman, running a temperature of 101 degrees to 103 degrees F., and losing flesh rapidly. She has had no intercourse since. Examination showed the presence of an abundant ichorous discharge, containing numerous gonococci. There can hardly be any doubt that she became infected soon after marriage, but the disease was of a mild, dormant character, as it often is in women. However, as is, also, often the case, pregnancy and labor stirred up the activity of the gonococci, the numerous raw surfaces offered a favorable soil for the growth of the germs, and the woman got a severe acute infection. From local, the infection soon became systemic, and she died of gonorrheal endocarditis.

Case 5. Age thirty-six. Married fourteen years. Has had nine miscarriages and three children, one of whom died within a few minutes and the other two within three days after birth. The woman is very anxious to have a child, as so many good women are; and although the husband knows that he was strongly syphilitic and that he infected her, he did not intimate to her that there was anything the matter with her, nor suggested that she needed treatment. The woman was considerably run down, but under proper treatment she gained rapidly in color, flesh, and strength. She asked if she could soon have a living baby. I told her, yes. But—I told her it would be best for her not to have any babies just now, because the child might be born sickly, deformed, or die in early infancy. Of course, she would rather die than bring into the world a sickly, deformed child, and she will take good care that she does not do it. After two or three years of constant, honest treatment, if all the symptoms and signs are negative, she might run the chance of giving birth to a child. What has that woman's life been but one continuous round of misery, suffering and disappointment? All because the husband married her when he was in a florid, infectious stage of syphilis, and because he knew that infecting and ruining the life of his wife carried with it no penalty for himself.

Case 6. Age thirty. Married nine years. Presents a horrible sight. Became infected,

apparently, within the first month of her married life, for she remembers she had a severe rash all over her body about two months after she was married. A homoeopathic doctor was then consulted and he told her it was due to measles. Now her nose is deeply sunken, she has an ulcerating gumma on the left collar-bone, an immense ulcer on the left leg—occupying almost two-thirds of the circumference of the limb—and a smaller ulcer on the right leg. The soft palate is ulcerated through, and her voice is, of course, extremely unpleasant. She has had several miscarriages, but unfortunately she gave birth to two living children also. Both of them are puny and sickly; one has a bad cataract of one eye, and the other is already showing signs of epileptic fits. Both are mentally below par, and if they are not fortunate enough to die at an early age, they will grow up to swell the army of deviates, defectives, and degenerates. Perhaps they will belong to the class of the criminally insane and will end their lives in prison.

Case 7. Pretty, charming, intellectual Mrs. X. Thirty-three years of age. Married five years. She married beneath herself socially and intellectually. But she was getting on in years, she became possessed of that unreasonable fear of remaining an old maid, and—the chief reason—she had a strong maternal instinct and was “just crazy” to have a child.

People do not suspect how strong this instinct is in many women. I did not suspect it myself until I saw it in my own practice; and many men would be painfully surprised if they knew the real reason why their wives married them. Many times, I repeat, it is simply the irresistible desire to become a mother. And as they see the years passing, they become seized with a subconscious fear of never being a mother; and then they accept the first “reasonable” offer, a man who may be very far removed from their ideal. And as a rule such women are rather cool to their husbands and pour out all their love and affection upon their children; these fill out all their life.

As I said, Mrs. X married Mr. X principally because she wanted to be a mother. Imagine her disappointment, then her chagrin, then her despair, when year after year passed, and no sign of a child. Without her husband's knowledge, she had herself examined and was pronounced healthy in every respect. She disliked to broach the subject, but so strong was her desire for a child that she overcame her reluctance and spoke to her husband, who pooh-poohed the matter; but she insisted, and he came to me for an examination. She came with him.

[Concluded in November Issue.]

BOOKS—Continued

Collected Papers by the Staff of St. Mary's Hospital (Mayo Clinic) for 1911. Octavo of 603 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, \$5.50, net.

W. B. Saunders Company presents to the medical profession in this work a most valuable collection of articles. Each member of the Mayo Staff is a specialist in the field in which he writes. The different members of the Staff have contributed articles in their several departments. Besides bearing evidence of the accurate and scientific tendency which permeates the organization, the unusually large experience in practical work enables each writer to speak with authority, and his statements of experience may be so taken.

The subjects treated have been classified under the following heads:—Alimentary Canal, Hernia, Genito-Urinary, Ductless Glands, Thorax and Extremities, Technic, and Miscellaneous Papers.

The book is profusely illustrated with drawings by the staff artists, photographic and X-Ray reproductions, which the highly calendered paper used in the volume brings out most beautifully.

The book concludes with a fitting sketch and tribute to the late Dr. William Worrell Mayo, father of Drs. William J. and Charles H. Mayo, himself a surgeon of large experience and usefulness. B. O. A

The Surgical Clinics of John B. Murphy, M. D., at Mercy Hospital, Chicago. June, 1912; August, 1912. Published Bi-Monthly by W. B. Saunders Company, Philadelphia and London.

Number 3—the June issue—maintains the same high grade as numbers one and two. The result of the bone work is especially interesting. The pictures and radiograms increase greatly the value of the work.

Any new diagnostic method is of general interest. The Five Diagnostic Methods described in the last sections are:

1. Percussion of the kidney—to determine acute congestion, infarction, retention in the pelvis of the kidney or ureteral obstruction.

2. Hammer-stroke percussion; driving the flexed second finger sharply against the gall bladder—to determine an acute infection of the gall bladder, or acute obstruction of the cystic or common duct, with or without infection.

3. Deep-grip palpation to determine gall bladder disease.

4. Piano percussion to demonstrate a small quantity of fluid or exudate in the abdominal cavity. The percussion is so light that the tympany from the intestine is eliminated.

5. Simultaneous palpation of both iliac fossae in cases of suspected acute appendiceal involvement.

In number four—the August copy—the first article on appendicitis and pneumonia is especially good. The number of cases of pneumonia that simulate abdominal troubles is so great that one needs to be continually on the look-out for them.

Murphy lays stress on the very great danger of operation in pneumonia. The case related was allowed to go to abscess formation with drainage after the crisis of the pneumonia.

The second article on chronic appendicitis reiterates Murphy's teaching that the order of symptoms in appendicitis is very important. 1st, pain; 2nd, nausea and vomiting; 3rd, local sensitiveness; 4th, fever; 5th, leucocytosis.

In speaking of an abscess case he says: "On opening the abdomen the condition was such that to remove the appendix at that time would materially have increased the hazard of the patient's life. The first rule of surgical practice is that a patient's life must not be hazarded unnecessarily in any procedure."

The Clinics undoubtedly deserve the enthusiastic support they are receiving.

F. C. B.

MISCELLANY

INFORMATION DESIRED CONCERNING TYPHOID THERAPY.

To the Editor:

Dear Sir: I will consider it a favor if you can find space to include in the next number of your journal the following letter that will be selfexplanatory:

To the Readers of the Denver Medical Times and Utah Medical Journal:

About six years ago the writer began to use vaccines in the treatment of typhoid fever. Since that time he has thus treated more than one hundred cases and has ob-

tained numerous articles upon the same subject written by physicians in various parts of the world. It seems possible, however, that some may have escaped notice. He also realizes that many of the profession may have treated some cases without reporting them. A paper upon the subject is now in the course of preparation. In this it is earnestly desired to incorporate reports from a large number of cases, good, bad, and otherwise. He accordingly makes the following request to the readers of this journal:

Will any one who has used vaccines in the

treatment of typhoid fever, whether but one case or more, kindly communicate to him that fact, accompanied by name and address of the reporter. If the results have already been reported, a note of the journal in which they appeared will be sufficient. If they have not been reported, a short blank form will be sent to the physician to be filled out. Due credit will be given in the article to each person making a report. If any physician happens to know of other confreres who have any such cases, it will be appreciated if he sends their names, as they may not happen to read this note. It is hoped that by this means a sufficient number of cases may be collected to somewhat definitely settle the now mooted question whether vaccines are or are not of benefit in typhoid therapy.

Reports of cases will be accepted at any time in the future, but preferably by November or December of the present year.

Kindly communicate with Dr. W. H. Waters, Director of the Department of Pathology and Bacteriology, Evans Institute for Clinical Research, Boston, Mass.

Success of New Manager.—The Denver Chemical Mfg. Co., manufacturers of Antiphlogistine, are to be congratulated on securing the services of Mr. Harold B. Scott, as Manager of the Company, to succeed J. C. Bradley, who is retiring from that position.

Mr. Scott is a bright, energetic young man, a graduate of Yale University with the degree of A. B. Upon his graduation from college he entered the commercial world where he has enjoyed a wide, varied and successful experience in developing one of the great industries of our country. He is peculiarly well fitted for the management of a proprietary house, and his connection with Antiphlogistine will doubtless lead The Denver Chemical Mfg. Co. to spell success with larger letters than ever before.

Like Tragedies at Sea.—"Inert digitalis can be compared to a life preserver that will not float. The tragedies caused by the one in disasters at sea have been duplicated by the other in many a household."

So said a practitioner of wide repute, who appreciated the situation as few really do.

We shall never know how many lives have been lost because of the failure of digitalis preparations to act, at the critical moment. The fluids dispensed today are variable in composition and uncertain in action—notoriously so. Two investigators found a wide variation in the strength of these preparations, stating that a difference of as much as 400 per cent may be expected, at times, in different specimens of the drug.

"Several preparations, purchased at retail drugstores, have been examined at this laboratory; while some were more active than the pharmacopeial preparations, others were much less potent; some had no digitalis action on the heart; and one which had de-

teriorated badly was directly depressant to it, a result which, to say the least, would be disastrous to any one suffering from heart disease."

Even if they are right to begin with, fluids deteriorate rapidly. Recently, eight fluid extracts from eight different firms were assayed after a lapse of 22 months, one showed 33.3 per cent deterioration and several 16 per cent.

It is plain from this that doctors cannot be too careful in the selection of their preparation. Personally, when we have occasion to use digitalis or to recommend it, we select digitogen—which is a trituration in milk sugar, of the several active glucosides of the drug. It is active, that we know, and it remains active. It is supplied by The Abbott Alkaloidal Company both in tablet and powder form. Being soluble it may be given in solution when desired.

Convalescing Children.—In children convalescing from acute infectious diseases, whooping-cough, bronchitis and similar affections, Cord. Ext. Ol. Morrhuæ Comp. (Hagee) is always indicated; nor is it necessary to dwell upon the fact that in scrofulosis, rickets and other diseases of malnutrition, there is nothing better than Cord. Ext. Ol. Morrhuæ Comp. (Hagee), and it has always been relied upon in tuberculosis. On account of its palatability, patients will take it in quantities and long enough to secure results.

Anaemia and Tissue Waste.—Tissue waste, which is secondary to depletion of the system by interference with tissue repair, is often very persistent for the reason that it is not accorded systematic treatment. The failure to correct anaemia and tissue waste is a serious mistake. The practitioner's duties are by no means over when the acute disease has spent its force. In fact, the physician should regard it as a routine duty to institute such treatment, at the conclusion of an acute disease, as will look to the correction of anaemia, and the repair of depleted tissues. Such a course changes the results remarkably—and of course insures the patient against many subsequent untoward results which accrue from the lowering of the resisting powers of the economy.

In treating anaemia and tissue waste Bovinine is of great value. This agent is a pure tissue food and contains all the nutritive elements. It contains true animal iron, which is incomparably superior to any of the inorganic preparations that can be found.

It should be given in increasing dosage, and continued until there is no longer any clinical evidence of anaemic, and until the former state of the tissues, as regards the matter of waste, has been restored.

The Control of Pain.—The work of the conscientious physician is many sided and diverse, but no part or detail of his manifold duties is ever more obligatory or imperative than the control of pain. In the presence of

physical suffering any other consideration than its prompt and positive relief, with rare exception, becomes of secondary importance. But insistent and pronounced as the physician's duty always is to control and assuage the pains to which human flesh is subject, it should ever be his aim to accomplish this noble purpose in the best, as well as in the quickest possible way. Otherwise, with regard only for a patient's comfort, it is extremely liable that the agencies of relief will be attended by consequences serious in the extreme and not infrequently more harmful in effect than the original pain itself.

The foregoing has particular significance for the cautious physician, inasmuch as he has in Papine a pain-relieving measure that enables him to control pain promptly and effectively, with the least possible untoward action. Representing as it does all the anodyne properties of the most potent opiate, but with the usual objectionable features reduced to a minimum, Papine is undoubtedly the most efficient analgesic at the command of the profession. Compared with the useful opiate, Papine will be found much more free from those disagreeable effects ordinarily considered inseparable from preparations of opium, such as constipation, nausea, gastro-intestinal derangement, and tendencies toward habit formation. Thus it can be employed in a wide variety of conditions with confidence, not alone in its anodyne and sedative action, but equally in avoidance of disagreeable or unpleasant by-effects. In brief, Papine is the ideal preparation of opium, presenting all the advantages of this well-nigh indispensable drug with its nauseating, constipating and habit-forming tendencies reduced to a minimum.

Congestion and Sepsis.—Congestion of all organs, especially the stomach and kidneys, always accompanies a septic condition; hence it is apparent that a drug introduced into this already abnormal area must be absolutely non-irritative, freely soluble in the gastric fluids, quickly and easily absorbed by the blood and tissues, and finally eliminated without irritation to the already over-acting kidneys. Burnham's soluble Iodine so completely meets these indications, that its effects are always accomplished with gratifying despatch and uniformity.

The Appetite in Tuberculosis.—In view of the fact that hypernutrition, or so-called forced feeding constitutes one of the important indications in the treatment of many cases of tuberculosis, more than ordinary attention must always be devoted to maintaining the appetite. Unfortunately, many of these patients have an aversion to the very foods which are best adapted for repairing and resisting the ravages of the disease. It is here that Gray's Glycerine Tonic Comp. serves one of its most important purposes, by reason of its notable capacity to awaken a deficient appetite in a perfectly natural manner. It not only possesses the desirable feature of great palat-

ability but through its tonic properties, it never fails to impart just the right tone to the digestive organs. Thus the effects are so much more permanent and far reaching than are obtained from ordinary stomachics, that not only are largest quantities of nourishment freely taken by the patient, but a correspondingly increased amount finds its way to the remote tissues.

Plasmodial Anemia.—In spite of the modern theory of the etiology of malaria and malarial affections (mosquito-borne infection) this plasmodial disease continues to be rife in certain sections of the country and bids fair to be, like "the poor," "always with us."

Every physician of experience appreciates the principles which should guide him in the treatment of the various acute manifestations of paludal poisoning, i. e., the destruction of the plasmodial hosts which have invaded the blood and which, if not eliminated, consume and destroy the red cells, the vital element of the circulating fluid.

When this purpose has once been accomplished the patient is but partly cured; the damage done to the red corpuscles must be repaired and the vitality of the blood restored, if re-infection is to be avoided. If there is any one condition in which direct hematinic or blood-building therapy is positively indicated, it is in Post-Malarial Anemia. As soon as the febrile period has passed, iron, in some form, should be given in full dosage. Pepto-Mangan (Gude) constitutes the ideal method of administering this essential blood-building agent in this as well as in any anemic condition. Both the iron and manganese in Pepto-Mangan are in organic combination with peptones and are therefore easily and promptly absorbed and assimilated without causing digestive derangement or producing constipation.

The Effective Treatment of Constipation.—Gradually the profession are beginning to realize that Prunoids offer the ideal treatment for all forms of constipation traceable to functional causes.

They produce their results by stimulating normal secretions, rapidly increasing the fluid content of the feces and gently increasing peristalsis. They are extremely palatable, easily taken by even young children, and when brought in contact with the secretions rapidly disintegrate and produce their specific medicinal effect.

Probably the most gratifying feature of Prunoids is what for lack of a better term may be called their remote effect. While prompt and decided catharsis follows their administration in six or eight hours, a mild and salutary laxative influence is observed for several days after the final dose of Prunoids. Other cathartic measures act just the reverse, and after their use the bowels invariably show greater lethargy and sluggishness.

Atophan,—the new therapeutic agent in gout and articular rheumatism, discovered by Nicolaier (the therapeutic sponsor of Urotropin), is eliciting the most favorable comment in all parts of the country. This product is not an addition to the already long line of uric acid solvents, but a definite chemical substance (2-phenyl-chinclin-4-carbonic acid) possessing the physiological action of powerfully increasing the uric acid excretion and performing this function electively and innocuously.

That this increased excretion is not brought about by a primary stimulation of the uric acid formation, but entirely by the increased ability of the organism to rid itself of uric acid, has been definitely demonstrated by Drs. E. Frank and B. Bauch, who have been carrying out extensive pharmacological researches in this field under the direction of Prof. W. Weintraud, head of the Department for Internal Medicine, Municipal Hospital at Wiesbaden, Germany. (Berliner Klinische Wochenschrift, August 7, 1911). Definite quantities of uric acid intravenously injected to gouty patients and followed by therapeutic doses of Atophan, were quantitatively excreted the next day. Furthermore, upon administration of 10 grammes of nucleic acid to gouty patients and subsequent Atophan medication, the corresponding quantity of uric acid was excreted within 24 hours. The authors designate Atophan as the theoretically ideal therapeutic agent in gout and express the hope that clinical findings may substantiate this anticipation. Since that time the authors' hope has been more than fulfilled by numerous reports of excellent results obtained with this drug in hospitals, sanitarium and in the private practices of some of the leading specialists in diseases of the metabolism both in the United States and Europe.

My Experience With Styptol.—The author reports his results with styptol in over 50 cases. There always was a prompt effect

upon hemorrhage from the genital tract from various causes, without the slightest injurious after-effects. Depending upon the duration of pregnancy, the author prescribes 6-8 tablets in miscarriage. In this way, the hemorrhage was checked the first day and involution of the uterus was prompt. The same excellent results were obtained with styptol in artificial delivery; the bleeding soon ceased and the uterine muscle contracted. Less blood was lost during the puerperal period and the secretion was scantier. In one case, manual separation of the placenta was necessary. Since the placenta was not expelled on the following day and the interference was necessary, owing to severe hemorrhage, as much as 10 tablets of styptol daily were prescribed. The womb contracted and the bleeding promptly ceased. Styptol was also effective in numerous cases of menorrhagia from various causes. Dr. Magerstedt-Weissensee near Berlin. (Deutsche Medizinisch-Ztg. 1911, No. 39.)

Victor Koechl & Co. Announces.—The Pharmaceutical Department of this company has taken over the importation and sale of the Modern Medical Preparations of the Farbwerke, formerly Meister Lucius & Bruening, Höchst-on-Maine, Germany, for which Victor Koechl & Co., and their immediate predecessors have been the American agents for the past forty years.

The purpose of the change is to identify the name of the Farbwerke, formerly Meister Lucius & Bruening more closely with their products.

The management of the Pharmaceutical Department of the Farbwerke-Hoechst Company will be the same as that of Victor Koechl & Co., so that the change is practically one in name only.

We hope for a continuation of the good will and interest shown towards our products in the past. Farbwerke-Hoechst Co., H. A. Metz, resident, 34 Beach St., New York.

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SOME EXPERIENCES IN MEDICAL SELECTION FOR LIFE INSURANCE

S. T. McDERMITH, M.D.,

Denver, Colo.

The writer submits herewith a brief review of, and a few comments on fifteen years' experience in medical selection in the capacity of medical director or "Supreme Physician," the title given to that functionary in the particular fraternal insurance order whose medical department it was his privilege to supervise. In the beginning my work was more or less crude, for, up to that time (1896), but little technical knowledge of medico-insurance had been developed or promulgated. Hence, book knowledge of the subject was necessarily meager. Up to that time the subject was not taught in any medical school in this country, and literature on the subject was so limited as, practically, to be non-available for the average physician in the field who did the local examining. The latter thus with but slight conception of the elements that enter into rating for life insurance (other than state of health of the applicant at time of examination), was greatly handicapped, with the result that a large percentage of the examinations possessed but minor value.

When we consider the great advance in the direction of diagnostic accuracy, and the vastly better training of the profession generally that has taken place in the last fifteen or sixteen years, it is easy to surmise that the average examiner was not very efficient in about the only domain of examining that was then apparent to him, viz., the weeding out the organically diseased from the healthy. No doubt, hordes of applicants with diseased vital organs were then passed up to the Medical Director with the certificate "First

Class" over the signature of the local examiner. Some such lesions, no doubt, go undetected by present day examiners, but the percentage of such oversight is certainly much less than it was one or two decades ago. Since then several text books on medico-insurance have been published, a number of medical schools are providing lectures devoted to that branch, a great amount of literature has emanated from the Medical Directors' Association, representing the legal reserve companies, and from the medical sections of the National Fraternal Congress and Associated Fraternities.

Aside from all this educational influence permeating the ranks of the profession, most of the Medical Examiners in Chief of the orders have formulated extended instructions with which their own examiners in the field are supplied. So that now the average examiner appreciates the many factors in a life risk that tend to determine good, bad or indifferent longevity, in a far more enlightened manner than he did years ago. He is thus equipped to be a much more potent factor in the process of medical selection.

Illustrative of the inadequate conception of the average examiner up to a few years ago as to what constitutes a good insurance risk, and of his treating the work seriously, I quote from a paper I presented to the Medical Section of the National Fraternal Congress four years ago, as follows: (This was a tabulation of the first eleven years experience in the order with which I was officially connected).

"There was detected in 71,000 examinations:

One case of heart lesion in 410 examinations.

One case of weak, irritable or tobacco heart in 825 examinations.

One case of aneurism in about 23,860 examinations.

One case of arterio-sclerosis in about 35,500 examinations.

Taking all circulatory diseases or defects, there was detected one in 268 examinations.

Of pulmonary, bronchial or pleural lesions there was found one in 780 examinations.

Of kidney lesions, as per all signs, there was found one in 717 examinations.

Of albumin, there was detected one in 1,145 examinations.

Of sugar, there was detected one in 2,449 examinations.

Of pus, one in 71,000 examinations.

Of indefinite or ill-defined kidney complaints, one in 10,143 examinations.

Rated by the examiner as 'unsafe,' one in 1,775 examinations.

Of about 4,000 applicants that have (up to that time) been rejected by myself, the local examiners rated 78 per cent of them as first class; near 22 per cent as average; less than 6/100 of 1 per cent as unsafe risks."

This shows the scant opportunity that is afforded the medical referee to reject on account of disease or physical defects disclosed by the examiner. Nearly 90 per cent of rejections, in my experience, have been, not on account of disease discovered by the examiner or suspected by me, but on account of adverse personal or family history, abnormal physique or "moral hazard." The educational influences, previously enumerated, have, in the last few years, wrought a great influence for the better. While I have not subjected the last four years of our experience to the rigid test the foregoing shows of the

previous eleven years, yet an approximately correct showing will give the local examiners, as a class, credit for near a hundred per cent improvement over the work of the preceding eleven years, judging by the much larger percentage of organic lesions discovered and the fuller understanding displayed of the factors in a risk that affect longevity. While the writer's experience does not compare in extent with that of some others in the same line of work, yet it has been considerable, amounting in round numbers to 100,000 examinations reviewed, and 2,500 each of death and disability claim proofs scrutinized. Early in my experience I appreciated that there were different grades of even acceptable risks—a few, perhaps 10 per cent, could be graded as first class; 80 to 85 per cent as medium or average; and 5 to 10 per cent below average, yet seeming too meritorious to reject.

It was my practice to lessen the order's liability on the latter class by scaling them down; that is, to approve for some amount less than that applied for, as there was no provision in the fraternal scheme to compensate by means of a loaded premium for sub-standard risks. This class and the rejected class were nearly equal, amounting to, approximately, 7 per cent each. Certainly as many or more of the rejected class on which the order assumed no liability, have died, as have those of the reduced class. The already matured (by death) claims of the latter class enable me to estimate the saving to the order incident to both reductions and rejections as amounting to date, approximately, to one million of dollars.

I found medico-insurance an interesting field, one that has undergone intensive cultivation in the last one or two decades; and, like clinical medicine is susceptible of still greater improvement, as lessons are derived from more extensive mortuary statistics.

**PROFESSOR DR. EDMUND VON NEUSSER—DEAD; HIS LIFE;
HIS WORK.**

DR. ZDENKO VON DWORZAK,
Denver, Colo.

The flag flies at half mast on the buildings of Vienna University. It proclaims the decease of Edmund von Neusser, whom a painless death delivered from tortures lasting for months—tortures which the invalid bore with a patience and resignation only possible with a man of his harmonious and firm principles. The great physician and scientist departed too soon from his life. The man who prolonged the life of so many, had to join the dead, before the rich and precious content with which a gracious nature invested him, had been exhausted. Science mourns the apostle of many a new idea. Physicians deplore the loss of the master of diagnosis, who solved his problems at innumerable sickbeds with his rare store of information and an almost never failing intuitive perception. But Neusser was more than a scholar of genius; he was a noble man, who cherished the highest and most beautiful conception of our medical profession, a real joy to his patients in the palace or in the lowly hut.

Court Councillor Edmund von Neusser was born in 1852 near Krakau, Austria; studied under Drasche, Bamberger and Stricker; pursued later in Strasbourg and Paris neurological and sero-therapeutical studies, and began his activity as a teacher at Vienna University in the year 1889. The scientific works of Neusser include monographs on pellagra, urinary pigments, gallstones, jaundice, diseases of the blood, angina pectoris, dyspnoea and retarded or increased heart action. He wrote also the first really fundamental book on the diseases of the pancreas and of the diseases of the suprarenal capsules.

Of Neusser's importance as teacher and physician in the clinics, all who saw

his activities at the bedside can have but one opinion. Neusser said in few words what others could explain only by long dissertations, and he was rich in new and fruitful ideas, as were few of his contemporaries. This was perceived in full measure by those who were fortunate enough to come into close contact with Neusser, and who studied under him at his clinics. During those hours of discussion with Neusser, one conceived the clear impression, that his brain was the gateway for an uninterrupted stream of new and scientific ideas, which he shared with his associates with generous hand. He went his own way in diagnostics and, basing them on a knowledge of literature which bordered on the miraculous, often made the most surprising diagnoses. In this way Neusser's lecture was always a rare scientific enjoyment, which it is true could only be appreciated entirely by those who already possessed a thorough previous knowledge of internal medicine. His students often asserted that Neusser lectured on "higher internal medicine." This is the explanation, why there were amongst Neusser's students so many physicians, native and foreign. Neusser was one of the teachers most sought by American physicians, who considered it an obligatory duty, not to miss a lecture of Neusser's. Every one of them knew that he could gain in knowledge more in this one hour than in many hours by studious application to books.

Neusser was a diagnostic pathfinder in the style of Skoda. In the clinics he was an advocate of the experiment. He was also an untiring therapist and examined thoroughly all remedies that were recommended by eminent physi-

*Read before the Medical Society of the City and County of Denver.

cians. He discovered new remedies which have gained a high standing in the modern therapeutic armament. Neusser was the first to use radium emanations in form of bath and internally in the treatment of rheumatism and nervous diseases.

That such a man of knowledge so profound and of genius so great must be a great physician, does not seem inevitable to the initiated; but Neusser was not only the great scientist, he was indeed just as great a physician. For the greatness of his mind found its harmonious complement in the benevolent, kind, all-forgiving disposition of his heart. Neusser was the great physician because he was animated by the highest desire to help his sick fellow-creatures, to repair their health, or if this was impossible, to alleviate or ease their lot. How often Neusser told us: "Of what help to the poor patient is the diagnosis of the greatest genius, if we cannot help him?"

After hours of work Neusser used to sit at the piano, finding there recreation and exaltation. Especially fond was he of his connational composer,

Chopin. It is well known that Neusser, not to disturb his surroundings, used often to visit a friend in the middle of the night, who lived in a lonely cottage in the country, to play the piano sometimes until dawn. His love of music brought the scientist together with a famous star of the Vienna Court opera, Paula Mark, whom he married. Nobody who was ever so fortunate as to hear Neusser at the piano accompanying the songs of his wife will be able to forget that artistic enjoyment. His beloved piano also helped him in his last hours over his pains and tortures.

For his own glory or fame Neusser never cared. He was the prototype of modesty and bashfulness; he depreciated himself, he, whom others worshiped as a star, all his colleagues, his students and his patients. They all stand at Neusser's bier deeply mourning. Their heartfelt grief is alleviated by a feeling of proud joy: Neusser's head is wreathed with the evergreen laurels of a master of science, a medical artist. Edmund von Neusser lived to live for eternity.

210 Metropolitan Bldg.

SALVARSAN NO THERAPIA STERILISANS MAGNA IN SYPHILIS.

J. CUNEO, M.D.,
Denver, Colo.

When Professor Ehrlich announced two years ago to the scientific world that he had discovered a remedy that would cure lues with "one single dose," I rejoiced at the idea that eventually this most terrible disease would have no more dread for men. In my declining days I saw his name standing foremost in the ranks of the benefactors of humanity. He looked to me already as grand as Jenner, Lister, Koch and Pasteur.

Unfortunately, my enthusiasm was of short duration. It was soon cooled by the fact that even patients that had

been given "606" once every week for three consecutive weeks commenced to show, after six, seven, nine months or a year, the dreaded mucous patches.

So much has been written and so much has been said about the undoubted efficacy of arsenobenzol, and it has now been used long enough so that, not considering the profound admiration that I have for Prof. Ehrlich, I believe it is the right time to discuss the true value of the remedy.

Finger of Vienna, Koffman and Kromayer of Berlin, Marshall of London, Gaucher of Paris, Tomaszewski of

Berlin, Wynn of Indianapolis, Goldenburg and Kalinski (*Amer. Jour. of the Med. Sciences*, 1911), Winfield and Potter of Brooklyn, N. Y., were among the first to notice and publish that "606" did not eradicate the disease. From my own observations I have arrived at the following conclusions:

First. That it has, no doubt, a rapid healing action on the primary lesion, but that it does not, by any means, sterilize the syphilitic organism, because after the use of salvarsan the relapses are more numerous than after the usual mercurial treatment, a fact that proves beyond a doubt that it cannot cure syphilis.

Second. That we must not depend absolutely on the negative Wassermann reaction, because in many cases the reaction proved negative, although made a month previous to the secondary manifestations.

Third. That the remedy has a delaying action on the evolution of syphilis, a fact that renders it a treacherous one, because patients treated with it believe that they are cured, while six, seven, nine months and even a year and a half after treatment they present mucous patches rich in spirochaetae pallidae.

Fourth. That I believe, with Gaucher of Paris (owing to the serious renal disturbance manifested in patients after taking "606") that the remedy is a dangerous one, because, as all arsenical preparations are in heavy doses dangerous to the kidneys, it is bound, some time or other, to produce a toxic congestive nephritis.

As I have gone so far, I deem it necessary at this moment to briefly quote a case of Professor Paul Mulzer of the University of Strassburg, reported in *The American Journal of Dermatology and Genito-Urinary Diseases* (June, 1912), which can leave no doubt of the fallaciousness of the remedy:

The case is one of a medical student of Professor Mulzer's university. After

a prolonged sexual continence, this student ventured coitus with one whom he considered a healthy prostitute. On the day following intercourse he showed up at the clinic with a badly torn frenum, which was repaired by stitching. The next day he returned with an acute gonorrheal urethritis. In conformity with the German law, the prostitute was reported to the authorities at once, and upon examination a diagnosis was made of gonorrheal bartholinitis, and in addition she was found to be affected with a fissure and fistula in ano, and a general scleroadenitis. The latter symptom being to Professor Mulzer suggestive of syphilis, the young man was given intravenously 0.4 gram of salvarsan as a prophylactic. The injection was given on the **third** day following intercourse. Exactly twenty-two days after his exposure our future colleague showed a primary lesion, plentifully endowed with the dreaded spirochaeta pallida, just at the site of the torn frenum.

I have been tempted many times to give salvarsan to my patients, but on second consideration I emphatically refused to do so, for the sole reason that I did not feel justified in administering to them a remedy that I would not unhesitatingly take myself. And today I do not regret in the least that for **twenty-two years** I have given to these unfortunates, intravenously, mercury, the remedy that has stood the test for the last 400 years.

In the past, as far as I know, "606" has only been given in cases of secondary and tertiary syphilis, but when we stop to consider that it will not arrest nor cure the disease, even if given three days after sexual intercourse, as in Professor Mulzer's case, just quoted, I feel that **we should ask ourselves if the time has not yet arrived to relegate this dangerous drug to the armamentarium of the old, old pharmacopoeia and refrain from taking patients' money under false pretenses; that is, promising an absolute cure for**

syphilis with salvarsan alone, because if we continue along this false road, we must, volens nolens, consider ourselves worse than the highwayman. Yes, worse than the highwayman, be-

cause he risks the gallows, while we, under the palladium of our diploma, are permitted to be at liberty unmolested.

A RESUME OF FOUR HUNDRED CASES OF TUBERCULOSIS IN WHICH X-RAY HAS PLAYED AN IMPORTANT PART*

J. D. GIBSON, M.D.,

Denver, Colo.

Mr. President and Members of the Association:

Many of these cases have been before this society in reports and papers before this, and I take the liberty of bringing the report up to the present time and then discussing various points in a very informal manner, so as not to weary your patience with an old subject. You will remember that I have adopted or rather used in the treatment of these three hundred and eighty cases of tuberculosis what I have designated as the method of intensifying natural elements to the point of becoming therapeutic agents. I read a report before this association in 1901, at the Buffalo meeting of the association, in which I reported five cases, which were my first cases treated by this method, and, I am glad to say, three out of the five cases are living today, in good shape, and have been at their accustomed employment for years. One of that number died on February 22, 1907, of acute pneumonia on the seventh day of the attack. The day he was taken ill he weighed 185 pounds. When I first treated him six years before, he weighed 120 pounds. There are now 380 cases from which we can draw information. I find out of these cases that were treated as long as two months, or long enough for the treatment to get any hold upon the case, there are 44 dead from all causes and 10 doubtful or uncertain. In 380 cases of tuberculosis, treated and watched, through the time

of eleven and twelve years, I think you will find that the above claim is a remarkable showing, especially, when you take into consideration that the great majority of these cases are advanced second and third stage cases. Practically fifteen per cent dead in twelve years, and eighty-five per cent living. These cases are from no state or eleemosynary institution, where you can control your patients, who, in spite of you, will do many things they should not, and you have to put up with it. Many lack money for proper care, and I have seen more than one facing starvation itself, but in spite of all these difficulties, the figures stand eighty-five per cent living today—a fact of which I am very proud, and I believe no other method of treatment in second and third stage cases can show any such record.

Many of you are familiar with my method of treatment from papers already read before you, but as there may be some here who are not. I will briefly describe my manner of treating pulmonary tuberculosis. As heretofore remarked, the method is "The Intensifying of the Natural Elements to the Point of Making Them Therapeutic Agents." The first and most important agent probably is X-ray, which is intensified sunlight, which is Nature's greatest foe to tubercular bacilli. Second, wherever you find very great dryness of the atmosphere, as we have it frequently in Colorado, you will no-

*Read before the American Electro-Therapeutic Association, September 4, 1912.

tice everything metallic you touch in walking around your room will give an electric spark to your fingers. You will notice in times like this your paretics usually do well, or better than at others. I claim that this static charge to which the patient is constantly subjected is one of the most valuable conditions of this wonderful climate. This can be produced as desired by the static machine, thus intensifying this natural element as desired. Third, ozone, through which is passed a vaseline antiseptic nebula and inhaled into the lungs, is a personification of an intensified fresh air. The element of ozone is probably the most advertised of any of the agents named, but probably the least useful.

With X-ray more chemic light can be put through the lungs in ten minutes than can be had from ordinary sunshine in months. I claim the irradiation from X-ray produces first an hyperaemia of the lung tissues, and that this can be modified by the amount of X-ray used in each individual case. This engorgement of the lung and the continued effect of the chemic light produce inhibition of development and finally death of the germs, which, being liquefied and removed by the leucocytes, liberate the toxins of the bacilli, thus forcing nature to furnish amoebocytes for their neutralization, thus giving us the purest, most suitable auto-genous vaccine imaginable. Another thing, the X-ray penetrates the tubercles, old and young, and exercises its destructive power in these encapsulated foci, where no other agent can possibly reach, as there is usually no blood supply in them.

With these agents, I have the climate of Colorado in which to do my work—the place which I selected for myself, when suffering with tuberculosis. All things taken into consideration, I consider that Denver has more natural advantages, to say nothing of its excellent physicians, hospitals, sanitariums, homes, all of which are needed, as you

might say, a necessity, to one suffering from tuberculosis. Probably, there is no place better supplied with these necessities than is the city of Denver. Besides the climate of Denver, use has been made of medicine, forced feeding, rest or exercise, plenty of fresh air, with all the sunshine possible, in the management of these cases.

From the experience gained in these cases, I believe it would be possible to place, in absolute safety, at least ninety per cent of all cases, including all complications. I believe the mortality should be almost nil in the first and second stage cases, and by patience and perseverance, eighty per cent of all third stage cases should be so relieved they should never die of tuberculosis; but allow me to remind you here that cavity cases are slow and tedious, requiring much more care and time than the other cases.

As almost all cases of tuberculosis of the lungs die from complications, I will discuss some of the more serious complications as I find them. I have found that serious tubercular complications of the kidney and bladder are difficult to overcome. Not only tubercular conditions of the kidney, but also the more common forms of nephritis are liable to cause fatal termination, and I have, so far, no definite measures of relief in these cases, as forced feeding, from its strain on the heart and kidneys, brings danger on the one hand, and light diet and starvation turn the patient over to the ravages of the bacilli, so I consider a serious nephritis a very dangerous complication of tuberculosis.

I have seen four cases die from exhaustion and starvation, from the pain on deglutition, from a special ulceration of the epiglottis and arytenoids. This, probably, is the most agonizing complication that can occur in a case of tuberculosis. I have had Dr. L. B. Lockard, of Denver, amputate the epiglottis in two cases, which relieved temporarily the intense pain, so the patient could eat and drink with pleasure at

once, but it was only temporary, as the ulcerations continued to appear, pain returned and patient soon died from exhaustion.

In this form of complication, I will insist on an artificial opening in the stomach, so the patient can be fed through it, that their vitality and strength may be retained and the larynx may be allowed to rest and be subjected to local treatments, including X-ray. I realize that this procedure, without an agent like X-ray, in which you could put your entire confidence in its ability to cure the disease in the lungs and larynx, would be foolishness. But my confidence in X-ray will prevent me from ever again sitting idly by, only to watch the ravages of the disease and the fatal termination.

For tuberculosis of the bowels, and especially the variety of "Tabes Mesenterica," X-ray is a positive specific. Other X-ray operators in Denver, besides myself, claim this to be a fact. I have seen tubercular diarrheas relieved by X-ray, and not even a dose of bismuth administered. These patients in a few days could eat cabbage and ham without inconvenience, and progressed steadily to a favorable termination.

Tubercular fistulas from rectum, bone, unhealed operative wounds, and in empyema are frequently easily healed by X-ray, and especially when to the X-ray is added Beck's paste. This paste can be made radioactive by exposing it for a considerable time to the X-ray, then heated and injected and rayed again, and this kept up until the fistula heals. I want to call your attention to this procedure, especially as I do not believe it is being used to the extent that it should be. I consider it, in connection with X-ray, a great boon in medicine; even in the old, unhealed, discharging empyemas it is a very "magnum Dei bonum."

Allow me to prophesy that I believe that in the very near future we will be able to locate the larger cavities in

third stage pulmonary tuberculosis by X-ray stereograms so definitely, that by long hypodermic needles we will be able to introduce this or some other radioactive agent to fill out these cavities and cause them to heal, probably in one-tenth the time that it takes to heal them at the present moment.

X-ray has given us an entirely new light upon the origin or first place of infection in pulmonary tuberculosis. The time-honored right and left apex infection is shown ordinarily to be secondary to involvement of the bronchial and mediastinal glands. X-ray has proven beyond question that in at least sixty-five per cent of cases the infection is primarily located in these glands, and that infection spreads out over the lungs in a more or less fan-shaped direction, usually spreading more rapidly towards the apex, probably aided in this direction by the circulation of the blood and lymphatics, and on this account we get the first crepitation in one or the other apex. As X-ray, without question, has demonstrated its great value in tubercular cervical adenitis, I claim there is no reason in the world why it should not act equally as well upon the bronchial and mediastinal glands, and therefore in all incipient and suspicious cases of tuberculosis of the lungs, X-ray should be used at once in an effort to stop the infection in these glands, and thus abort their effect in the chest at once. It is my opinion that you get more ready results in the glandular cases, than you do when the infection is from the pleura or air passages.

Heretofore, I have claimed that X-ray gave us its greatest result in the second and third stages. What I meant by this is that we see the greatest effects of the treatment in these cases. For instance, greater gains in weight, greater changes in the cough and greater changes in all the physical conditions, but we must remember one reason for this is, the incipient case has probably lost no weight and has very

little cough. His physical condition is very slightly changed, if anything, from normal, therefore there is less room for great changes in the physical condition of the patient; but since we know that this infection now, in the vast majority of cases, is a real glandular tubercular condition, I would consider X-ray more imperative than ever in the incipient state.

Much investigation has been made of the effects displayed by the leucocytes in the progress of cases of tuberculosis in the last three or four years. Webb's theory is that the large mononuclear leucocytes have a special affinity for tubercular bacilli, and the power of digesting the wax coating of the bacilli with ease, and are the only one of the various forms of leucocytes that performs this service with safety. He therefore reasons that any specific or agent of any special service in tuberculosis must have the power of increasing this special form of leucocytes. I am not willing to say they don't, but the whole leucocytic picture changes so easily and so quickly, is affected by so many agents and conditions, as digestion, exercise, sleep, fasting, etc., that it is difficult to say anything with definiteness; therefore, it is excellent in theory but worthless in practice.

Today, after between eleven and twelve years of experience with this

method of treating tuberculosis, I consider it has no rival worthy of comparison. I speak advisedly, as I live and practice medicine in Denver, Colo., probably the greatest Mecca for tuberculosis in the world, and a city second to none in medical men versed in the management of tuberculosis. So I know and see what is being done all around me in the treatment of this disease, and I tell you now that I do not believe that results in second and third stage cases obtained with tuberculin, vaccines, dioradin or Wright's mercury treatment will compare favorably at all with the method of which I am writing. The ray and adjuvants get their best results in this very class of cases. It is an agent of power and usefulness in the advanced and hopeless case, where you can not even consider the use of vaccine or tuberculin.

In closing this paper, I want to emphasize the absolute harmlessness, when properly managed, of X-ray in any stage of tuberculosis. I have used it in incipient and suspicious cases on down in any stage, until at the very gate of death, and I have never regretted one single exposure and I have never seen an untoward effect or had cause to regret one single treatment out of the many thousands I have given during the last twelve years.

OUTLINE OF LOCAL PALSIES AND STRABISMUS.

FACIAL PARALYSIS.

General Characters: Difference in two sides of face shown by whistling, closing eyes, wrinkling forehead and showing upper teeth.

Peripheral: (7th nerve): Uncombined, usually complete; early trophic changes and reaction of degeneration; usually from pressure on swollen nerve in mastoid canal (deafness, tinnitus, dizziness.)

Central (7th nerve): Usually incomplete—eye can be closed and forehead wrinkled; often with hemiplegia.

Fifth Nerve Paralysis: Palsy of masseters and buccinators; anesthesia and pain over one side of face and forehead; may be neuro-paralytic ophthalmia.

Localization.

Complete paralysis with R. D. in infranuclear lesions.

Upper part of face spared in supranuclear lesions; emotional innervation preserved.

Loss of taste in front part of tongue if nerve affected in lower part of canal.

Deafness, without evidence of middle ear disease, if nerve affected in internal auditory meatus within skull.

Reeling gait and often deafness in cerebellar lesions.

With ptosis, external squint and involvement of other cranial nerves in basal lesions.

Crossed paralysis due to lesions in pons between decussation of pyramid and facial fibers.

Only lower jaw (masseters and temporals) paralyzed from growths or inflammation at base of skull, hemorrhage into medulla or pregressive bulbar paralysis (tongue and lips).

Both sides of face from bilateral lesions in medulla or pons, basal tumors or, very rarely, bilateral cortical or peripheral lesions.

With paralysis of opposite arm and leg and conjugate deviation of eyes away from lesions, in affections of medulla.

General Treatment of Bell's Palsy: If ear disease present, make provision for free drainage; if syphilis, give potassium iodid or mercury or both; in cases due to cold ('rheumatic' palsies) use counterirritation with cantharidal collodion, fly blisters or actual cautery behind ear or over occiput. Open bowels freely and give alkaline diuretics and diaphoretics or hot baths; small doses of mercury useful in inflammatory stage, and later mercuric iodid or general tonics and galvanism (stop when contractures threatened).—Anders.

Special Causes.

Unilateral.

Uncombined.

Neuritis: From exposure to cold, rheumatism, or injury from blow, forceps or fracture; salicylates often of service.

Purulent Middle Ear Disease: Especially with petrous caries.

Swollen Parotid Gland, Tubercular Nodes in Neck or Tumor at Base of Skull.

Small, Intracranial Basal Growths: Usually gradual, spreading to other parts; early loss of electric reactions.

Basal Hemorrhage: Sudden; most common in new-born.

Basal Embolism or Thrombosis: Sudden and slow respectively; crossed hemiplegia or paralysis of 6th nerve on same side.

Hemorrhage into Nerve-Sheath or Sternomastoid Canal: History of injury; nervous deafness and vertigo.

Trauma: Fracture of skull (usually with nervous deafness), stab-wounds, boxing ears.

Locomotor Ataxia: Rarely in late stages.

Basal Meningitis (Acute or Chronic) and Syphilis.

Hemorrhage, Softening or Tumor of Medulla.

Cephalic Tetanus: Usually on same side as septic injury.

Disseminated Sclerosis: Intention tremor, nystagmus, scanning speech.

Hysteria: Facial palsy extremely rare, usually unilateral; stigmata.

Combined.

Basal Syphilitic Arteritis: Face and arm on same side, soon followed by paralysis of opposite leg.

Acute Anterior Poliomyelitis: Unilateral facial and brachial very rarely.

Acute Softening, Hemorrhage or Sclerosis of Pons: Crossed hemiplegia; abductor palsy.

Rarely Tabes or Alcoholic and Diphtheritic Multiple Neuritis.

See also Crossed Hemiplegia above.

Bilateral: Rare.

Destructive Cortical Lesions: With monoplegia elsewhere or hemiplegia and loss of consciousness.

Acute Myelitis of Medulla: Glosso-labiopharyngolaryngoocular paralysis; rapid pulse, dyspnea, difficult mastication.

Diphtheria: Multiple neuritis; sometimes identical with preceding.

"Asthenic Bulbar Paralysis": Similar to progressive bulbar paralysis, but without drooling or degenerative symptoms, and with ptosis, diplopia and dilated pupils.

"Oculofacial Paralysis": Palsy of upper face, ophthalmoplegia, ptosis; congenital or in children; bulbar and pontal nuclear lesions.

Large Cranial Growths: Gradual, spreading, complete facial palsy; external squint, ptosis; early loss of electric reactions; choked discs.

Bilateral Ear Disease, Extensive Meningitis, Arteritis or Tabes.

Syphilis (irregular), **Uremia** (rare).

LINGUAL PARALYSIS.

Unilateral: Tongue deviates toward paralyzed side when protruded; one-sided wasting and rugosity.

Localization.

Sudden, usually unilateral, in cortical lesions.

Gradual, usually bilateral, with atrophy in patches, in true bulbar paralysis (lesion in pons).

One-sided, with wasting of same side, in lesions of hypoglossal nerve either within or outside medulla.

One-sided, with wasting of opposite half, and homologous hemiplegia, in lesions of motor tract above nucleus (cortex, internal capsule, crus or pons).

Bilateral in nuclear disease (weakened lips and pharynx).

Special Causes.

Unilateral.

Apoplexy: Loss of consciousness.

Hemiatrophy due to Progressive Muscular Atrophy: Atrophy precedes paralysis.

General Paralysis of Insane: Progressive dementia.

Chronic Lead Poisoning: Colic with constipation; wrist-drop.

Hypoglossal Neuritis: Most frequent cause; flattening and atrophy; mucous membrane in folds; pressure on nerve

in forearm or wounds or tumors in neck.

Treatment: Treat underlying morbid process; mixed treatment for syphilis; general tonic treatment in all other conditions; try counterirritation at occiput in inflammatory conditions.—De Schweinitz.

Meningitis: Particularly syphilitic; usually with paralysis of soft palate, one vocal cord, sternomastoid and trapezius of same side.

Caries of First Cervical Vertebra: Spinal accessory often involved also.

Bilateral.

Glossolabiopharyngeal Paralysis: Atrophy, fibrillary tremors, mucous membrane in folds; usually associated with neuralgic pains, muscular spasms, anesthesia and disorders of special senses; from arteritis, thrombosis, trauma, softening, sclerosis, tumor or third stage of amyotrophic lateral sclerosis.

Treatment: Incurable; strychnin and electricity may be tried; special care in feeding patient—use stomach tube when deglutition much impaired.—Osler.

Picrotoxin sometimes of great benefit.—Ringer.

Partial in facial paralysis and rarely in diphtheria.

PHARYNGEAL PARALYSIS.

Diphtheria: Commonly palsy of pharynx and soft palate; fluids regurgitate through nose on swallowing; patient cannot blow out cheeks or utter, b, p, d, t, g, k; palate not elevated on saying "Ah!"

Treatment: Absolute rest, good food, good air; iron in a digestible form; strychnin in full doses by mouth or, in severe cases, hypodermically in cervical and clavicular regions; careful massage of extremities; electricity, artificial respiration, rhythmic tongue traction and strychnin subcutaneously if respiration endangered.—Francis Huber.

Laryngeal Paralysis: Unilateral al-

ways organic; see under speech defects above.

General Treatment: Etiologic treatment; electricity with intralaryngeal electrode in diphtheritic and other toxic forms.—Church.

Periodic Paralysis: First form affects muscles of one eye, with local pain, headache and vomiting; from emotion, shock or menstruation. Second form a family type affecting muscles of body; sometimes after infections; lasts 1 to 3 days. Third form apparently malarial; daily or every other day, with fever and critical sweats; quinin prevents.

CONTRACTURES.

General Characters: Flexion and adduction as a rule; rigidity observed first in muscles corresponding to area most affected—prior to paralysis in basal tumor or meningitis—later in non-cortical than in cortical lesions; cerebral contractures increased by excitement—lessened during rest or sleep; rigidity simultaneous with apoplectic or epileptic seizure is due to mechanical irritation, and disappears in a few days; “early rigidity” (in a few days) due to irritation of reactive inflammation; “late rigidity” (in 2 to 5 months—increasing and permanent—usually upper limbs) due to degenerative changes; spinal contractures (contractions) permanent, fixed, not relaxing in any way, with shortening of tendons.

Causes: Muscular atrophy and paralysis; injury, inflammation and ankylosis of joints; rachitic changes in bones; primary diseases of muscles (atrophy, injury, inflammation) or nervous system, particularly anterior poliomyelitis, brain and cord tumors, embolism, interpartum hemorrhage (Erb's congenital spastic spinal paralysis), localized infectious processes, nerve injury, spondylitis with compression of cord, chronic meningitis, hydrocephalus, syphilis of brain, multiple sclerosis, ergotism or reflex action from sympathetic irritation, local injury or

foreign body; cicatrices from wounds or burns or sloughing cellulitis; syphilis (affects biceps cubiti particularly); paralysis agitans (knees flexed, thighs adducted, elbows bent; hands in position of holding pen).

Treatment: In mild cases regular manipulation by stretching or continuous mechanical extension may suffice, but tenotomy usually indicated, followed by mechanical extension, either gradual or immediate and total.—C. B. Keetley.

Hands and Fingers.

Claw-hand (paralysis of interossei and lumbricales, with contractures) from ulnar paralysis (cannot move little finger) or median paralysis (ape-hand; thumb cannot touch little finger), due to neuritis (usually following injury or occupation with pressure on nerve) or destructive lesions in anterior cervical cord (particularly progressive muscular atrophy—early symptom, usually bilateral) or hand area of cortex; rarely from poliomyelitis or Morvan's disease (painless whitlow).

Flexion of forearm, hand, thumb and fingers in cerebral palsy of children and infantile cerebral hemorrhage, thrombosis or embolism; also in post-hemiplegic irritation, descending degeneration, amyotrophic lateral sclerosis (easily excited fibrillary twitchings) or hysteria (disappears under anesthetic and on stroking); club-hand congenital, traumatic or paralytic.

Wrist-drop: Edgewise from neuritis or acute infantile poliomyelitis; forward from chronic poisoning by alcohol, lead and other metals (usually bilateral; local pain generally absent in lead-drop—present in other forms; lead palsy preceded by numbness and slight tremors) or from pressure by crutches or from sleeping on arm (unilateral).

STRABISMUS.

General Characters.

Paralytic: Diplopia the rule; secondary deviation greater than primary; false projection of visual field;

vertigo; altered carriage of head (chin turned in direction of action of affected muscles); limited movement in direction of paralyzed muscles, angle of squint increasing in this direction, decreased in opposite; squinting eye may have the better vision; in associate (pontile) paralysis eyes can be turned toward paralyzed side only as far as middle line.

Central palsies binocular and usually associated with other symptoms indicating intracranial mischief; almost impossible to fuse images with prisms. Head drawn toward lesion (conjugate deviation) and away from paralyzed side (opposite deviation) in lesions of hemisphere (one side of cortex or internal capsule or corpora quadrigemina); drawn away from lesion and toward paralyzed side in lesions of pons or mesencephalon; unilateral convulsions, with head and eyes turned toward convulsed side, in irritating lesions of hemisphere—turned away from convulsed side in lesions of mesencephalon.

Basilar palsies usually monocular and associated with hemianopia and involvement of iris and ciliary muscle.

Peripheral palsies more apt to be isolated and complete.

Associated movements (convergence, divergence, looking upward or downward) may be lost in hysteria or organic central disease, particularly of cortex.

Spasmodic: No secondary deviation; squint present in all positions; limitation of movement less marked and less constant than in paralytic form.

Concomitant: Squinting eye can follow other in all directions, the angle of squint always remaining the same; squinting eye promptly fixes when other is covered; primary and secondary deviation equal; diplopia seldom troublesome (image suppressed or disregarded); squinting eye often amblyopic; no false projection or characteristic carriage of head.

Localization: Patient is seated with head and eyes 5 meters from candle flame, one eye being covered with a piece of red glass. Double images seen chiefly when eyes turned in direction of action of paralyzed muscle. False image (of affected eye) travels farther away from true image when candle is moved in direction of paralyzed muscle, and is projected in direction toward which paralyzed muscle normally rotates eye. Inclination of false image always corresponds to inclination which paretic muscle in sound state gives to vertical meridian. In concomitant cases, relative power of muscles measured by finding strongest prism that can be placed before one eye and still permit two images of object to be fused into one.

Internal recti should overcome a prism of about 30° placed before either eye, base outward; external recti, 8° , base inward; superior and inferior recti, 3° , base downward or upward.

Squint.

Internal or Convergent: Lesions of 6th nerve; crossed hemiplegia if lesion in pons; monoplegia and squint on same side of body in cortical lesions.

External or Divergent: Lesions of 3d nerve; unilateral, with irregular pupils and tremor or ataxia of opposite arm, in lesions of peduncles of cerebellum; coma or deep sleep—turned upward.

Congenital form often with crossed hemiparesis or hemiplegia.

Homonymous Diplopia: Abductor paralysis—visual axes crossed; image of right eye to right and left to left.

External Recti: Meridians diverge at top in looking down and toward affected side—also in looking inward and toward sound side; meridians converge in looking up and toward affected side.

Superior Obliqui: Meridians diverge in looking down and toward affected side.

Inferior Obliqui: Meridians con-

verge at top in looking up and toward affected side.

Crossed Diplopia: Adductor paralysis—visual axes diverge; image of right eye to left and vice versa.

Internal and Inferior Recti: Meridians converge at top in looking down and toward sound side.

Superior Recti: Meridians diverge at top in looking up and toward sound side.

False Image: Elevated above other in paralysis superior recti and inferior obliqui; lower than other in paralysis inferior recti and superior obliqui; inclined to right in paralysis left superior rectus, left superior obliquus, right inferior rectus or right inferior obliquus; inclined to left in paralysis of right superior rectus, right superior obliquus, left inferior rectus and left inferior obliquus.

Oculomotor Paralysis: Crossed diplopia (false image higher with top inclined to affected side); downward and outward rotation of eye; limited movements in all directions, except outward and slightly downward; secondary deviation outward; false projection inward; chin tipped up; ptosis; paralysis of accommodation; medium dilation of pupil, not contracting to light.

Ophthalmoplegia: Usually simultaneous and symmetric paralysis of conjugate extraocular muscles and upper part of face; early diplopia, disappearing later; ptosis as a rule; intraocular muscles generally escape if lesion nuclear.

Crossed or Alternate Ocular Paralysis: Motor oculi with opposite hemiplegia in lesions of crus (iris and ciliary muscle often escape); abducent in lesions at posterior edge of pons.

Treatment in General.

Paralytic: Massive doses of potassium iodid for syphilis; potassium iodid and salicylic acid useful in rheumatic cases; strychnin or ascending doses of tinct. nux vomica in suitable cases; prisms in glasses when degree

of strabismus not too great; galvanic electricity with a current of not more than 1 or $1\frac{1}{2}$ m.a., with cathode on closed lid, anode on temple; tenotomy or advancement of paralyzed muscle as a last resort.—De Schweinitz.

Nuclear Palsy or Ophthalmoplegia: Mercury and potassium iodid useful in syphilitic subjects only when onset acute or subacute; in cases chronic from beginning, use arsenic, quinin, strychnin (hypodermically), and small tonic doses of mercury in syphilitic patients.—Gowers.

Concomitant.

Convergent: Properly fitted glasses for refractive error; Javal orthopedic training in moderate degrees of strabismus and residual squint after operation; tenotomy of one or both internal recti, with or without advancement of externus.—De Schweinitz.

Divergent: Suitable glasses for refractive error; tenotomy of one or both externi, sometimes with advancement of internal rectus.—De Schweinitz.

Spastic: Correct any errors of refraction and instill atropin.—Stevens.

Special Causes.

Paralytic Strabismus.

Syphilis: Recurrent, transient, alternate, usually oculomotor; often anesthesia of skin of face; rarely before 6th month.

Rheumatism: Usually external rectus of one eye; after "catching cold" in rheumatic subjects.

Diphtheria: Usually external rectus; may be bilateral.

Diabetes: Commonly external rectus.

Lithemia, Gout, Neurasthenia, Influenza, Herpes Zoster.

Whooping Cough: Nuclear hemorrhage.

Poisons: Internal squint usually; chronic nicotineism, alcoholism, plumbism; gelsemium, chloral, sulphuric acid; carbon dioxid; decayed fish and meat.

Basal Disease of Brain: Hydrocephalus; meningitis, particularly tubercular (sudden, early, convergent or divergent squint); tumor; apoplexy or clots; abscess from otitis; softening; aneurysm; anemia; obliterative syphilitic arteritis or gumma; parietic dementia, multiple sclerosis; bulbar paralysis, nuclear degeneration.

Locomotor Ataxia: Often partial, temporary and relapsive.

Other Diseases of Spinal Cord.

Injuries Involving Ocular Muscles or Nerve Trunks: Fracture of orbital walls or base of skull; orbital hemorrhage, tumors, periostitis, cellulitis, tenonitis; local pain, exophthalmus, blepharitis and conjunctivitis in all.

Disease of Frontal Sinus.

Violent Migraine: Recurrent oculomotor.

Peripheral Neuritis: Usually from alcohol or poisons.

Reflex Disturbances.

Congenital Defects: Sometimes from use of forceps.

Sleep and Deep Anesthesia: Divergent squint and myosis.

Hysteria: Marked convergence; varies daily; amblyopia or monocular diplopia.

Epilepsy: Very rarely.

Oculomotor Paralysis.

Simultaneous Bilateral: Tumor or gumma between crura cerebri; aneurysm of posterior cerebral artery.

Isolated or Successive paralysis of one or more branches a certain sign of nuclear lesions.

Ophthalmoplegia: General; sudden or gradual.

Chronic: Usually from progressive, degenerative syphilitic or tubercular nuclear disease; also due to optic nerve atrophy, congenital defects, progressive muscular atrophy, chronic bulbar paralysis (early somnolence), disseminated sclerosis, locomotor ataxia and progressive paralysis of insane.

Acute: Often with fever, vomiting, convulsions, prostration; from hemorrhage, basilar embolism, injury, poisons (alcohol, ptomaines, sulphuric acid, lead, nicotine, carbon monoxide), infections (syphilis, tuberculosis, influenza, pertussis, diphtheria), diabetes, acute poliomyelitis, bulbar or facial paralysis.

Strabismus with Exophthalmus from injury or inflammation of 3d, 4th and 6th nerves in sphenoidal fissure; thrombosis, or arteriovenous aneurysm (pulsating exophthalmus) of cavernous sinus or one internal carotid (anesthesia of upper half of one side of face).

Spastic (Convergent) Strabismus.

Hysteria: Rarely observed; either eye alone moves freely in all directions; often spasm of eyelid or eyebrow; squint disappears under anesthesia.

Meningitis and Basal Brain Disease.

Reflex Irritation: Mostly from teeth and digestive organs.

Tetany: Bilateral tonic flexion of phalanges of feet and hands.

Concomitant Strabismus.

Hypermetropia: Convergent squint.

Myopia: Divergent squint.

Disparity in Length, Thickness or Tension of Opposing Muscles: Deviation in direction of stronger muscles—usually interni in hypermetropia, externi in myopia.

Wrong Relation of Visual Axes: Esophoria, exophoria, hyperphoria.

Irregular Size and Shape of Eyeball and Orbit and of distance between pupils: Short ball conduces to convergent squint—long ball to divergent.

Unusual Value of Angle Gamma.

Anisometropia.

Medial Opacities.

Congenital Unilateral Amblyopia or amblyopia ex anopsia or complete blindness.

Congenital Muscular Insufficiency aggravated by unrelieved hypermetropia.

Paralysis of Accommodation: Common after diphtheria and in lesions of

3d nerve from any cause; also early syphilis and late tabes, lactation, diabetes, trichiniasis, cerebrospinal sclerosis, essential anemia, masturbation, ex-

cessive venery, alcoholism, uterine affections, neuralgia of dental and other branches of 5th nerve, hysteria, neurasthenia and mydriatics.

MEDICAL PROGRESS

Some Practical Uses of Hexamethylenamin.—Under various trade names and in different combinations this remedy has grown to be more and more widely employed in all sorts of infections since that time (1895) when Nicolaier first demonstrated that when urotropin was taken by the mouth formaldehyde was liberated in the urine. Further investigations, particularly by S. J. Crowe of the Johns Hopkins Hospital, have shown that the same antiseptic decomposition takes place in the cerebrospinal fluid and in all the body secretions. Crowe has recently (Bulletin of the John Hopkins Hospital, September) reviewed the use of the drug in the treatment of systemic infections, with special emphasis upon its value as a prophylactic. He cites numerous cases of compound fracture of the skull, tumors of the hypophysis (with neighborhood symptoms necessitating operative procedures through the nose), post-operative cerebro-spinal fistulae, infections of the ear and paranasal sinuses, and acute poliomyelitis—in every series the hexamethylenamin exerting a noteworthy influence for good. Only the free and persistent use of the remedy can be expected to yield the results desired. "If the patient is able to take nourishment by mouth, from 2 to 3 grains of hexamethylenamin are added to every ounce of liquid, since the drug is practically tasteless, and it is often possible in this way to give from 60 to 100 grains a day without the patient's knowledge, and without producing gastric or renal irritation." Even very large doses (150 grains) have been given without ill effect, though a small proportion of patients manifest an idiosyncrasy (cutaneous rash, mucous membrane catarrh, irritation of stomach, kidneys or bladder) to the drug, with temporary discomfort, necessitating leaving it off for a time.

For Seborrhea and Comedones.—After cleansing with oils or glycerin or liquid soap, says Thomas S. Blair (September Medical Council), alcoholic lotions probably bring best results. The alcohol is used in one-fourth to one-half strength, with 10 or 15 grains of resorcin to the ounce, and a little castor oil may be added if desired. An effective ointment is one consisting of one part each of resorcin and washed sulphur, and eight parts each of lanolin and cold cream, to be applied each time after washing with the alcoholic lotion. Removal of comedones by expression, and washes of 5% sodium bicarbonate solution, are of value. A very prompt treatment, according

to Dr. Blair, is in the use of the following solution: Dissolve 1 dram zinc sulphate in 2 ounces rose water, and filter; dissolve 1 dram sulphurated potash in 2 ounces rose water, and filter; mix the two filtrates. After pressing out the comedones, wash with hot water and green soap; then apply lotion cautiously, as it may cause inflammation if used in excess.

Treatment of Vertigo.—Charles G. Stockton (August New York State Journal of Medicine) says it is expedient to have the eyes carefully refracted, and such relief given as may be possible to any aural defect, before attempting to relieve a vertigo which may in part depend upon an intoxication or circulatory disturbance. In the treatment of obscure cases he has had most success in following the advice of Charcot and Gilles de la Tourette; that is, the administration of quinin or salicylic acid for about three days, in sufficient doses to produce tinnitus. At first the symptoms are aggravated, but following this there is improvement, sometimes complete disappearance of the vertigo. "To correct faulty digestion, to secure sufficient gastrointestinal drainage [A. L. Benedict has been surprised at the regularity with which vertigo is marked by indicanuria and apparently caused by the antecedent intestinal putrefaction], to relieve, through dietetic reform, the overtaxed metabolism, to improve general elimination, and to establish, so far as possible, the normal flow of unirritating blood—these include the ends which we should seek to obtain for the relief of vertigo dependent upon general causes."

The Bran Cure of Constipation.—This old and valuable remedy is highly extolled by A. Ernest Gallant (New York Medical Journal, August 31). He says: "Among the several hundred patients whom we have taught the bran habit, there have been many who suffered with chronic diarrhea, alternating diarrhea and constipation, mucous colitis, enema constipation, constipation due to the use of castor oil, the saline waters and other drugs whose secondary effect is an astringent one and results in relative constipation." He feeds convalescing postoperative patients (even after celiotomy) a daily quota of bran and teaches them "the value of this beneficent habit." The best results have been obtained by the use of coarse, unground, raw bran, once or twice daily—one to four tablespoonfuls stirred in a glassful of cold water and quickly gulped down, or mixed

with cooked cereal and eaten with milk and cream. Many prefer to take it stirred in soup, puree, bisque, broth or gruel, and children like it mixed with jelly, jam, marmalade, honey, maple or other syrup, and spread on bread or toast. When taken just before going to bed, it should result in an action before the morning bath. If taken at breakfast, "a natural though mild alarm will be felt about noon, and this warning should always be promptly obeyed or the good effect will be lost." It may be necessary to continue the usual cascara or phenolphthalein laxative for a few days only.

Sodium Citrate in the Treatment of Pneumonia.—A method which is logical and which appears to have given exceptionally good results is described by W. H. Weaver in the *New Orleans Medical and Surgical Journal* for September. The remedy suggested, sodium citrate, has been used by Wright and others to lessen the viscosity of the blood (which is excessive in pneumonia) and so aid the circulation. Dr. Weaver gives his pneumonic patients 30 or 40 grains of the drug every two hours—children, a smaller amount according to age. In most cases in children, the temperature, pulse and respiration will fall to normal within 24 hours. If there is no improvement in 6 to 12 hours, the dose may be increased until it shows effect. This dosage should be continued night and day until the lung has entirely cleared up. The disease ends by lysis, usually beginning about the third day, under this treatment. Bathing for high temperature and strapping for pleurisy are not to be neglected, if indicated. The writer claims that bronchopneumonia is as amenable to the treatment as is lobar pneumonia.

To Relieve the Pain of Tonsillitis.—Irrigation of the throat with ice water from a fountain syringe (*American Journal of Surgery*) will relieve the congestion and the pain in acute follicular tonsillitis.

A Depletant Enema.—Walter T. Dannreuther (*International Clinics*) recommends in severe cases of gonorrheal metritis accompanied by hyperpyrexia, and in systemic gonorrheal infections, an enema of saline solution containing 4 ounces of magnesium sulphate and given at 70° F., repeated every four hours if necessary. Such a colonic irrigation aids in eliminating toxins and reducing fever.

Treatment of Tetanus With Carbolic Acid.—Dr. Stedman, editor of the *Medical Record*, writes favorably of the Italian method, originated by Baccelli, of treating this dread disease. It is very simple and much more successful as a therapeutic measure than tetanus antitoxin. The treatment consists essentially in subcutaneous injections of phenol in 3% dilution, given frequently enough to make the total quantity of the drug injected daily equal 0.3 to 0.5 c.c. (5 to 7.5 grains). As much as 14.5 c.c. of pure phenol has been used in five weeks, with a successful result and no untoward effect, though the urine should be closely watched.

Duodenal Feeding in Various Stomach Complaints.—Arnell reported before the last meeting of the Colorado State Medical Society very successful results in the use of this method in treating gastric and duodenal ulcer. It is equally in order in gastric atony, dilatation and ptosis, providing the pylorus is not obstructed. The method is very simple, but requires rest in bed and the presence of a nurse. The patient swallows Einhorn's duodenal tube, along with a pint of water, in the evening; by morning the lower end should have passed into the duodenum, as shown by the mark on the tube just outside the lips. This tube may be left in for three weeks or more. The food consists of a glass of milk containing an egg (whipped up) and a heaping tablespoonful of milk sugar—to be strained twice before using—and is forced into the feeding tube by means of a small syringe. The quantity of food is gradually increased until as much as 280 c.c. is given every hour. In one of Dr. Arnell's patients there was a gain of over 30 pounds within a few weeks, along with complete relief of symptoms.

The Relation of Diet to Heart and Blood-Vessel Disease.—In cardiac and vascular disease, particularly in the more advanced stages, diet is more than half of the whole treatment, says Louis Fangeres Bishop (*Medical Record*, September 28). He relates several cases of acute poisoning of the heart muscle by the products of intestinal putrefaction, greatly relieved or cured by a proper adjustment of the diet. The rule in such cases is to reduce the daily ingestion of food to 50 grams of protein and 2,000 calories. An ideal diet consists of bread

and butter, with a certain amount of milk to supply fluid, and enough cheese to make up the protein requirements, without an excess of carbohydrates or heat units. Fruits and green things are also needed in moderation. Very often we hear of the death of some prominent man just after a big public dinner. Dr. Bishop believes that these catastrophes are due, not so much to an attack of acute indigestion causing exhaustion, as to acute autointoxication from the rapid disintegration of an excess of protein food.

For Chronic Asthma.—The Medical Council states that chronic asthma is frequently relieved by applications to the chest and neck of the compound stillingia liniment of the American Eclectic Dispensatory. The original formula was as follows. Oil of stillingia, 1 ounce; oil of cajeput, 4 drams; oil of lobelia, 2 drams; alcohol, 2 ounces.

Dermotropism.—The cutaneous eruptions caused by certain drugs form a subject for an interesting article by Bernard Fantus and A. W. Stillians (September American Journal of Dermatology.) They conclude that dermatropism is, in general, in proportion to systemic irritant action; that non-irritant substances are not dermatropic unless they produce hyperemia or long-continued ischemia of the skin, or unless they give rise to anaphylactic reactions; and that anaphylaxis may play an important role in determining dermatropic reactions to drugs. The most common drug eruptions are the following:

Bromides and iodides—papulopustules.

Arsenic—Erythema, vesicles, urticaria and papulopustules.

Quinin—Erythema, urticaria, petechiae and vesicles.

Antipyrin—Erythema, papulopustles and urticaria.

Belladonna, stramonium, hyoscyamus—Erythema.

Opium and morphin—Erythema and urticaria.

Chloral—Erythema.

Horse serum or diphtheria antitoxin—Erythema and urticaria.

The New Cancer "Cure."—The formulas of Dr. Adolf Zeller's cancer remedies are given in the New York Medical Journal of

September 28 (from Pharmazeutische Zeitung), as follows: For internal use, potassium silicate and sodium silicate, of each 20 grams; milk sugar, 60 grams. One-quarter to one-half gram of this powder is given t. i. d. For external use, a powder is made of arsenous acid, 2 gm.; red mercury oxide, 6 gm.; and powdered animal charcoal, 2 gm.

Simple Treatment of Chloasma.—A small area of pigmentation (Medical Review of Reviews), not larger than a dime, is first selected and is touched lightly with pure carbolic acid, which is allowed to remain on for a few seconds, and is then neutralized with alcohol. In a few days scaling occurs, and with it the treated pigmented area disappears. A larger area may then be tried if the result has been satisfactory, and so on until all pigmentation has been removed. Large freckles may be treated in the same manner.

Preservation of Eggs.—The French method is to immerse the fresh eggs in lime water; preliminary immersion in boiling water is advantageous. Laroquette (quoted in Chemical Abstracts), after ten months found no egg moldy or rotten, while those aged three or four months had a perfect flavor. Potassium silicate solution is also a good preservative. Cold storage at 0° to 2° C. for four or five months did not entirely arrest the development of bacteria while the evaporation (4 or 5%) and humidity favor molding.

Coronary Obstruction as a Cause of Sudden Death.—In his address before the Iowa State Medical Society, James B. Herrick (Journal of the Iowa State Medical Society) describes the symptoms, which may be present for hours or even days before the fatal issue occurs. They include the following: Sudden, severe and often prolonged anginal pain; gastric distress, nausea and vomiting, shock and collapse, with a small, rapid, perhaps irregular pulse; may be acute emphysema of lungs with numerous moist rales, also tympanites, dyspnea and cyanosis varying in degree; scanty urine with a little albumin and a few casts; faint heart tones (further confused by hyperresonance of chest).

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MINERAL WATERS.

As an advance chapter from "Mineral Resources of the United States" for 1911 (U. S. Geological Survey—Department of the Interior), George Charlton Matson gives interesting figures on the production of mineral waters during the past year, and R. B. Dole considers the concentration of mineral water in relation to therapeutic activity.

With the possible exception of some thermal and salt springs, rainfall is the ultimate source of all mineral waters, the quantity and quality of dissolved material varying with the character of earth and the distance through which the water has traveled. Some thermal springs may have been set free from cooling volcanic magmas, and others may owe their heat to the fracturing and movement of geologic strata.

"Some of the saline springs may be supplied from oceanic waters included in sedimentary rocks at the time of their deposition, or introduced into porous beds that have been submerged beneath the sea."

The traffic in mineral waters in 1911 amounted, as reported from 732 springs, to 63,923,119 gallons, valued at \$6,-837,888. The average price was 10.7 cents per gallon at the place of origin. New York (51 springs) leads in the quantity of water sold, with Minnesota (17 springs) second, and Wisconsin (31 springs) third. In the value of waters sold for medicinal purposes, Indiana is far in the lead; while Wisconsin is ahead of all the other states in the value of table waters and in the total value of the waters sold. The total imports of mineral waters (natural, semi-artificial and strictly artificial) in 1911

amounted to 3,604,703 gallons, valued at \$1,037,485.

Although these was a general increase in the sales of mineral water last year, Colorado is one of the states which show a decrease (from 1,638,984 gallons in 1910 to 1,436,066 gallons in 1911, valued at \$104,763). Exclusive of the sales of plain or carbonated water, there were 162,000 gallons used in the manufacture of soft drinks. The fourteen managements reporting sales are the following:

Boulder Springs, Crisman, Boulder County.

Canon City Soda Spring, Canon City, Fremont County.

Clark Magnetic Mineral Spring, Pueblo, Pueblo County.

Columbia Well, Denver, Denver County.

Crystal Springs, Fowler, Otero County.

Deep Rock Artesian Well, Denver, Denver County.

Dr. Horn Mineral Springs, Colorado Springs, El Paso County.

Kearney Golden Spring, near Golden, Jefferson County.

Marshall Magnetic Mineral Spring, Pueblo, Pueblo County.

Navajo, Shoshone, Manitou, and Cheyenne Springs, Manitou, El Paso County.

Pueblo Mineral Springs, Pueblo, Pueblo County.

Ute Chief Spring, Manitou, El Paso County.

Ute Iron, Ouray, and Little Chief Springs, Manitou, El Paso County.

Yampah Spring, Glenwood Springs, Garfield County.

As to the therapeutic efficacy of mineral waters, Dole would classify as medicinal waters only those which contain at least a minimum dose of an active salt in four kilograms (a full day's drinking) of the water. Many waters owe their value to their character as fairly pure and palatable waters, free from organic contamination and from

deleterious mineral constituents. The writer calls attention to the fact, noted in the National Dispensatory, that the lithium ion has a greater affinity for the sodium phosphate of the blood than for uric acid; hence, it does harm rather than good, except as offset by abundant potations of water.

The chlorin waters generally have only a salt action; that is, they aid osmosis. The carbonate waters have an alkalizing, a diuretic and in large doses a laxative effect. The sulphate waters are essentially purgative, owing this action to the difficult absorbability of the sulphate ion. Magnesium sulphate is a stronger evacuant than sodium sulphate, since the sodium ion is much more readily absorbed than that of magnesium. Even calcium sulphate (commonly present in excessive amounts in so-called alkali waters) may prove purgative in large amounts, until a person becomes habituated to its presence. MacDougal concludes from the experience of the field expeditions from the desert laboratory of the Carnegie Institution, that water containing as much as 5,000 mgm. of dissolved salts per kgm., is inimical to health and comfort, though half this concentration may be used for periods of many days without serious discomfort. If there is really anything of therapeutic value in the radioactivity of springs, this property must be quickly lost in the kept and bottled waters.

THE BLOOD SERUM TESTS FOR SYPHILIS.

Generally speaking, that test is most reliable for him with which the laboratory worker has had the largest experience. So it is that in the detection of the syphilitic antibody by means of complement deviation, we have a considerable choice of variations and modifications of the original Wassermann test. As A. H. Sanford, bacteriologist to St. Mary's Hospital, Mayo Clinic, Rochester, Minn., remarks (September

St. Paul Medical Journal): "It is safe to say that there are very few men, in this country at least, who are following exactly, through all its cumbersome steps, the method of Wassermann, Neisser and Bruck." In the Noguchi modification a 1% suspension of human corpuscles is employed as an indicator, instead of the 5% suspension of sheep corpuscles of the original Wassermann test. The objection has been raised that the human indicator is too delicate, but, on the other hand, Noguchi "points out the fact that at times human blood serum contains a natural hemolysin for sheep corpuscles, and, as a result, a positive serum might give a negative reaction." In the Mayo laboratory the Noguchi test is used almost exclusively. Dr. Sanford brings out an important point, applicable to all the hemolytic tests, namely, not only to abstain from alcoholic drinks (change positive reaction to negative) for 24 hours, but also to take the blood from the patient in the early afternoon, the patient having omitted luncheon, since blood taken during the digestion of a meal may be too rich in antigenic lipoids. D. M. Kaplan, director of the laboratory of the New York Neurological Institute (New York Medical Journal, Sept. 7), calls attention to the facts that not only a positive Wassermann reaction may be given by a number of non-syphilitic diseases (malaria, jaundice, measles, scarlet fever, frambesia, scleroderma, etc.), but "there are in the reagents used a number of factors which contribute considerably to the erroneous reporting of positive after a previous negative reaction, such as a weakening amboceptor, an anticomplementary antigen, a poor complement; or unduly resistant sheep cells." Guinea-pig serum obtained 36 to 48 hours previous to the day of analysis was found much weaker than one obtained 12 to 18 hours previous to the testing. "This weakness was especially noted on rainy days, when the controls would show no

hemolysis in the slightest degree." If the patient's serum is not used within 24 to 36 hours, "substances develop that are at times very anti-complementary, and when not recognized may give the appearance of a legitimate positive Wassermann." "We also have an interfering factor in the sheep cells, if not used on the same day as the slaughtering of the animal. * * * It is a particularly dangerous procedure to prepare a stock mixture of sheep cells and amboceptors to be used the following day. Such a suspension will often prove to be very resistant to hemolysis, and may not even show hemolysis in the amboceptor efficiency control." Stone and Schottstaedt (Archives of Internal Medicine, July 15) have found the cobra venom hemolysis test in latent syphilis much more sensitive and reliable than the Wassermann test. The red blood cells of luetic individuals offer distinctly increased resistance to hemolysis by cobra venom.

THE UTILITY AND FUTILITY OF EXPLETIVES.

When the writer was quite a small boy he had two interjections which were employed to express his surprise or dissatisfaction with the course of events. The first one ("Sugar") was used in the presence of girls and ladies. The alternate one, vented in the company of other bad little boys, was a shorter word, though beginning with the same sound, and was in fact the rather coarse and somewhat fatuous expression with which Victor Hugo says the last firm-standing grenadier of the Imperial Guard at the battle of Waterloo made answer to the demand for surrender.

If we turn back the pages of history, we can readily believe that originally oaths were intended as a sort of conjuration, calling upon the Deity to witness the truth of an individual's statement, or else were used to call down curses upon the doomed one. In-

deed, no profane expert of the present day could possibly compete with those masters of anathema, the old fathers of the Church, who would begin at the bald spot on top of your cranium, and systematically damn you all the way down to the soft corn between your little and ring toes, omitting nothing in the anatomy between these two extremes.

Modern philosophers would have us believe that profanity is a sort of safety valve. Instead of killing the one who offended him, as the primitive man might have done, the more or less civilized person simply swears at him (*sotto voce*, if the swearee is bigger). There is considerable to be said in favor of such a view. When Washington rode up "like an avenging deity," at the battle of Monmouth, how much better it was for him to confound General Lee with a tremendous oath, than it would have been for him to imbrue his hands in the craven traitor's blood. When Andrew Jackson swore by the Eternal Jehovah, everybody knew that he meant what he said. The fact is, however, that swearing is nowadays so common that a good round oath means little more than to say "Piffle!" or "Sugar!" Except to shock the ladies, profanity has come to have little utility or effect.

We now come to the practical application of our text, and that is to find a vocabulary which shall give relief to the soul and yet not shock the sensibilities. The field is one for the profane writers, so called, particularly the tribe of linguists, but as a beginning of so laudable an undertaking we venture to suggest a few cathartic expressions for the consideration of any of our readers who may be interested in the gentlemanly art of how to swear decorously.

Instead of saying to a human being or animal who or which has given offense, words which rankle and are combustible, would it not be as well, say, to count ten in German in a low, deep voice and without smiling? Or, if very deep offense has been given, and one is tempted to bestow the opprobrious epithet indicated in print by three or four dashes, why not call him a *diplo-docus*, a *lithopedion* or some other good scientific *sesquipedalian* term? And finally, to express that pained astonishment which one suffers on striking his head against a door or his foot against a rocker, would not the exclamation "GINGER POP!" meet every requirement? Just think how one could grind his teeth on the "Ginger" and explode on the "Pop!" Eureka! we have found it.

PERSONALS

By the Editor and Associate Editors.

Dr. J. H. Samuel has removed from Denver to Fowler.

Dr. J. W. Amessee finds his new Ford car entirely satisfactory.

Dr. D. H. Coover spent the first part of October in California.

Dr. T. W. Scott has removed from Rocky Ford to Hutchison, Kan.

Dr. Walter M. Dake has removed from Denver to Hot Springs, Ark.

Dr. and Mrs. Moses Collins are the proud parents of a bouncing baby boy.

Dr. A. Bourquin is making a tour of Europe. He is now in Switzerland.

Dr. J. J. Pattee of Pueblo has been ill with pleurisy in Minnequa Hospital.

Dr. J. H. Woodridge is the Bull Moose nominee for coroner of Pueblo County.

Dr. and Mrs. C. B. Ingraham have changed their abode to 401 Franklin Street.

Dr. E. W. Spencer has returned to Pueblo after an extended sojourn in eastern cities.

Dr. and Mrs. S. D. Van Meter have returned to Denver from their European trip.

Dr. and Mrs. W. W. Williams of Colorado Springs spent a part of October in the East.

Dr. C. A. Wilson of Denver has associated

ted himself with Dr. Shaw, the Pueblo dentist.

Dr. and Mrs. W. C. Kent were visiting friends at Osborne, Kan., for a fortnight in October.

Dr. T. D. Russell of Pueblo has recovered from a long sickness attributed to ptomaine poisoning.

Dr. and Mrs. W. A. Burnham have returned to Boulder from a month's visit in the East.

Dr. Arthur R. Pollock of Monte Vista has been chosen a councillor of the State Medical Society.

Dr. Ralph Mendelson of La Junta has been appointed a surgeon in the United States navy.

Dr. C. W. Russell of Lamar recently attended the celebrated Mayo clinics in Rochester, Minn.

Dr. R. W. Corwin recently read a paper on "Eugenics" before the Albuquerque Medical Society.

In order that he may never, never be a knocker, Dr. R. S. Allen has lately had a hammer toe removed.

Dr. S. H. Savage of Rocky Ford is the Republican-Bull Moose candidate for coroner of Otero County.

Drs. E. T. Boyd and F. E. Neres have removed from the Metropolitan to the Railway Exchange building.

Dr. Richard C. Hughes was operated on recently by Dr. E. F. Dean for appendicitis, and has made a fine recovery.

Dr. George C. Stemen has been appointed chief surgeon of the Denver, Northwestern & Laramie Railway Company.

Dr. and Mrs. T. A. Stoddard charmingly entertained the Pueblo physicians and their wives on the evening of October 4th.

The next meeting of the Colorado State Medical Society will be held at Glenwood Springs on or about October 7-9, 1913.

Dr. J. P. Kastor of Topeka, chief surgeon of the Santa Fe system, was visiting friends in La Junta the second week of October.

Dr. W. T. Chambers, a prominent Denver dentist, was operated successfully for appendicitis while visiting in Massachusetts last month.

Dr. J. A. Black, president-elect of the Colorado State Medical Society, was calling upon his Denver medical friends in the second week of October.

Dr. Charles Jaeger and family have re-

turned from a summer sojourn in Europe, including the leading surgical clinics of England and the Continent.

Dr. and Mrs. Royal H. Finney of Pueblo expect to take possession of their new home at the corner of Twentieth and Elizabeth streets, early in November.

Dr. Elisha A. Hewitt, a pioneer physician of Routt County and the first man to stake out a coal claim there, died of pneumonia at his home in Denver, October 7th.

Dr. and Mrs. H. M. Thompson have returned to Pueblo from several weeks' visit in Pennsylvania. The doctor also spent some time attending clinics in New York.

Dr. J. N. Hall and Dr. A. J. Markley addressed the Fremont County Medical Society at Portland, Monday evening, September 23d, and were banqueted thereafter.

Dr. Earl Whedon (Gross, 1902), who is now doing a good special practice (eye, ear, nose and throat) in Sheridan, Wyo., was calling upon old Denver acquaintances in the latter part of October.

Health Commissioner J. M. Perkins attended the recent convention on hygiene and demography held in Washington, D. C., and investigated matters concerning municipal sanitation in a number of other cities.

Dr. Melville Black will be secretary of the State Medical Society for at least two years more, having been elected in 1911 for three years. Dr. George W. Miel will continue to control the society's funds for the same period.

The Medical Society of the City and County of Denver will hold their second semi-annual clinics, November 14-16. All who intend to attend these clinics should send word to the committee on clinic, 266 Metropolitan building.

Major George P. Lingenfelter attended the meeting of the Association of American Military Surgeons, held in Baltimore early last month. The association, numbering about 500, will meet in Denver next year, probably in October.

Dr. William F. Burg, who had practiced in Denver for twenty years, died at the Park Avenue Hospital, October 10th. It is said that twenty-four hours before his decease he prophesied the end, took leave of his friends and went to the hospital.

Dr. and Mrs. George H. Stover left Denver, October 20, for a second journey to Honolulu. They will return about the middle of December. During Dr. Stover's ab-

sence Miss Mays, who has had a decade of experience in the work, will continue in charge of the X-ray department.

Dr. Charles R. Towns (October Century), who has had special opportunities for observation, is inclined to believe that the percentage of drug-takers among physicians is much below five rather than fifteen, the latter figure having been alleged to be true by reputable medical writers.

Dr. L. Duncan Bulkley will give a fourteenth series of clinical lectures on diseases of the skin in the out-patient hall of the New York Skin and Cancer Hospital, at 4:15 o'clock from October 30th to December 18th. The course is free to the medical profession on presentation of their professional cards.

Says the *Pacific Medical Journal*: "The Bank of England is not the world's greatest treasure house. It has only \$180,000,000 in its vaults. The Denver mint holds the record with \$445,000,000 in gold coin and gold bullion. This will be increased by one-half, the issue of several of the other mints having been restricted."

According to the Pueblo Chieftain, the management of the Southern Colorado Hospital announces that the extension of the hospital is to be built at once, thereby nearly doubling its capacity. A novel feature will be the installation of an electric signal board connected with each cot and bed by push buttons within easy reach of patients.

The series of lectures which Prof. Carl von Noorden of Vienna is to deliver in several American cities on "New Aspects of Diabetes, Pathology and Treatment," will be issued in book form, October 26th, immediately at the close of the New York lectures, by E. B. Treat & Company, New York, who have published all his other monographs.

The Colorado Homeopathic Society, through its secretary, Dr. L. B. Wheeler, has publicly endorsed "the position of school boards in placing a course of social ethics in the public schools, said course to be voluntary with the parents." It also recommends that the parents attend these or similar courses of instruction.

At the annual election of the Denver Medical Club, October 4, the following officers were chosen: President, Dr. Nicholas Wood; first vice-president, Dr. E. Eckerson; second vice-president, Dr. Robert

Morrison; secretary, Dr. A. C. Craig (re-elected); treasurer, Dr. C. C. Bell (re-elected); board of censors, Drs. Durbin, W. B. Craig, Harvey, Vroom and Hill.

Dr. Joseph Cuneo was one of the orators who addressed the patriotic meeting of Greeks in the hall at 1438 Larimer Street, October 20th, inspiring them to enlist in the war against their ancient oppressor, Turkey. Great enthusiasm was manifested, a good number of recruits enlisted, and a surprising amount of money was subscribed to the good cause. Even the poor little bootblacks gave their savings of months.

At the annual election of the Denver Clinical and Pathological Society, October 3, the following officers were elected for the ensuing year: President, Dr. C. B. Lyman; first vice-president, Dr. George H. Stover; second vice-president, Dr. C. B. Van Zant; secretary, Dr. C. E. Walbrach (re-elected); treasurer, Dr. A. S. Taussig (re-elected); member of membership committee, Dr. H. B. Whitney; members of executive committee, Dr. F. W. Kenney and Dr. C. E. Edson.

Drs. Hall and Arneill entertained Dr. Charles Lyman Greene of St. Paul at a breakfast in Denver previous to Dr. Greene's address before the State Medical Society at Pueblo. Others present were Drs. Jayne, Grant, Sewall, Edson, Bergtold, Kinney, Whitney and Bonney. Drs. Hall, Jayne and Greene were entertained at luncheon at Colorado Springs by Drs. Campbell, McConnell, Swan and L. H. and H. R. McKinnie.

The twentieth anniversary of the beginning of the Denver Clinical and Pathological Society was fittingly celebrated, October 3, with a banquet, at which about forty members were present, taking place in the Palm Room of the Brown Palace Hotel. Four charter members still living in Denver (Drs. Levy, Pershing, Lyman and Hill) were the society's guests on the occasion, and were the recipients of more verbal bouquets than they ever expected to receive ante mortem. Dr. D. H. Coover, unavoidably absent in California, sent his regrets by telegraph, and was sent in return a telegram of best wishes from the society. The prime mover and animating spirit of the enterprise, Dr. Frank W. Kenney, made an adorable toastmaster and kept things moving until after midnight's

solemn hour. His poetical limericks will be preserved for the sake of auld lang syne, alongside of our Omar Khayyams.

It is with sincere sorrow that we chronicle the death from cerebral hemorrhage, at the age of 67, of Dr. William H. Buchtel, October 14th. Dr. Buchtel was a graduate of the Chicago Medical College, and served as an army surgeon in the latter part of the Civil War. He had practiced in Denver nearly forty years, and was in many respects the ideal family physician, continuing his obstetric work up to the time of his death. Dr. Buchtel was professor of obstetrics in the Gross Medical College during the fifteen years' separate existence of that institution. He was truly a "man whose word was as good as his bond." He was a brother of Chancellor Henry A.

Buchtel of Denver University. A widow (nee Helen Barnum) and a daughter (Mrs. F. J. Chamberlin) mourn a great bereavement. Dr. Buchtel's body was cremated at Riverside, October 16th.

Resolutions by the Staff of St. Anthony's Hospital Regarding the Death of Dr. William H. Buchtel.

In the passing of an old member of our staff, Dr. William H. Buchtel, we recognize keenly our great loss. With valued service extending over a long period, we came to appreciate his sterling personal qualities and dependability as a clinician. We shall ever remember his dignified presence, courtesy to his confreres and sincere devotion to our profession.

COMMITTEE.

FOREIGN JOURNALS

(Translated by Joseph Cuneo, M.D.)

Cutaneous Bovine Tuberculosis in Man.—Cosco, Rosa and De Benedictis, in the Journal, No. V, of Italian Policlinic, 1912, report a case of cutaneous tuberculosis of bovine origin in a man, which, after careful scientific study and observation, led them to the following deductions:

1st. That bovine tuberculosis, inoculated on the skin, shows a great tendency to remain localized and to heal.

2nd. That tubercular bovine bacilli, even after having been in the human body for three months and a half, maintain their virulency for oxen, without showing any tendency to transform itself from one type to the other, according to the opinion of certain authorities.

(La Riforma Medica, Naples, July 6, 1912.)

Blood-Letting in a Case of Poisoning With Carbon Monoxid by Incomplete Combustion of Charcoal, in Attempted Suicide, by A. Lombardi. In this case the author emphatically claims that even phlebotomy must be considered today an important curative measure, because the clinical observations have demonstrated that if in certain morbid contingency it may be harmful and constitute a danger, it will, no doubt, in many diseases render valuable services and become a prompt and sure assistance.

The author describes a case of a young man in whom bleeding gave a really ex-

traordinary therapeutic success. The patient had attempted suicide with incomplete charcoal combustion. He was found in a comatose condition, unconscious, pupils mydriatic, trismus, respiration superficial and stertorous, continuous emission of a great quantity of bloody foam from the mouth and nares, temperature much below the normal, the extremities very cold, cyanosis of the face, intensely red spots all over the body, pulse small, rapid and evanescent, action of the heart embryocardiac, and fine crepitant rales in all the extent of both lungs. The patient's head was immediately bathed with cold applications, he was given inhalations of oxygen, artificial respiration, mustard applications, frictions of the limbs, caffeine and camphorated oil hypodermic injections. Notwithstanding such quick and energetic therapeutic measures, the patient's condition was becoming more serious every moment. It was then that the author conceived that in such a case bleeding was imperative, and he did not hesitate in doing it, at the bend of the patient's right forearm, drawing over 200 grammes of blood. At the first gush it was of a dark red color, but it turned gradually into a red cherry color. He had to bleed the patient the second time in the left arm, drawing about 300 grammes of blood, and this time the effect was immediate and permanent.

The author ends his clinic-therapeutic case, giving some explanations in regard to bleeding the case cured by him, and he expresses the opinion that in carbonic intoxication blood-letting must be given the preference and priority to all the remedies

more commonly used, not overlooking the general condition of the patient and the possible contra-indications. (Tommasi, VII year, number 14, 1912).

(La Riforma Medica, Naples, August 31, 1912.)

BOOKS

Progressive Medicine. A quarterly digest of advances, discoveries and improvements in the medical and surgical sciences. Edited by Hobart Amory Hare, M. D., assisted by Leighton F. Appleman, M. D. September 1, 1912. Lea & Febiger, Philadelphia and New York. Six dollars per annum.

The latest number of *Progressive Medicine* comprises the usual careful digest of contemporaneous medical literature from all parts of the civilized world. Under "Diseases of the Thorax and its Viscera," Wm. Ewart brings out a number of new pulmonary and cardiovascular signs, and discusses atmotheapeutics at some length. In his section on dermatology and syphilis Wm. S. Gottheil expresses himself as not favorably impressed with the results of vaccine therapy in skin diseases, and considers that the best practice today in treating syphilis consists in the administration of both arsenobenzol and mercury. The subjects of pregnancy, labor and abortion, the puerperal period, and the care of the new-born child are thoroughly discussed by Edward P. Davis. Many new and interesting points on diseases of the nervous system are set forth by the editor of this section, Wm. G. Spiller.

E. C. H.

A Manual of Chemistry. A guide to Lectures and Laboratory Work for Beginners in Chemistry. A Text-book specially adapted for Students of Medicine, Pharmacy and Dentistry. By W. Simon, Ph.D., M. D., Professor of Chemistry in the College of Physicians and Surgeons, Baltimore, and in the Baltimore College of Dental Surgery; Emeritus Professor in the Maryland College of Pharmacy; and Daniel Base, Ph.D., Professor of Chemistry in the University of Maryland. New (10th) edition, enlarged and thoroughly revised. Octavo, 774 pages, with 82 engravings and 9 colored plates, illus-

trating 64 of the most important chemical tests. Cloth, \$3.00 net. Lea & Febiger, Philadelphia and New York, 1912.

When a text-book has passed through ten large editions, there can be no more doubt of its merit than of its popularity. Numerous additions have been made in the present issue, including articles upon exothermic and endothermic reactions, reversible reactions and chemic equilibrium, thermochemistry, solution, electrolytic dissociation, electrolytic solution, tension of metals, and ionic explanation of the action of indicators; and paragraphs upon many compounds of medical interest, as atoxyl, arsenobenzol, sodium cacodylate, fluorescein and phenolsulphonephthalein. The section on physiologic chemistry has been rewritten and considerably enlarged. The arrangement of the text in seven parts remains the same as before. The nine colored plates, representing important spectra and 64 chemic reactions, continue as an attractive feature of the work.

E. C. H.

International Clinica. A quarterly of illustrated clinical lectures and especially prepared original articles by leading members of the medical profession throughout the world. Edited by Henry W. Cattell, A. M., M. D., Philadelphia. Vol. III. Twenty-second series, 1912. Philadelphia and London: J. B. Lippincott Company.

Among the 26 complete articles in this number of *International Clinica*, each reader will find several which appeal especially to his present needs and interest. After 33 years of experiment, the mature conclusions of Prof. Theophilus Ciesielski as to sex determination are here published first in English. Albert Abrams continues his series of highly original articles on physiotherapy with a paper on "The Tonus of the Vagus." S. Solis-Cohen contributes a description of his method of treating pneumonia with massive intramuscular injections of the

double hydrochlorid of quinin and urea—heretofore described in, the *Denver Medical Times* under "Medical Progress." Two interesting cases of spontaneous gangrene, illustrated with a colored frontispiece, are related by Albert E. Roussel. Arthur Dean Bevan contributes a handsomely illustrated paper on tuberculosis of the genitourinary organs. The very important subject of adult flat-foot is well presented by Walter G. Stern. John B. Deaver furnishes his records of a year's work in appendicitis. Maria M. Vinton has the final paper, on industrial poisoning, which is both entertaining and instructive, but she is somewhat hazy in the use of chemic terms. White lead is not lead oxid, the dark blue line at the gingival border is not lead sulphate (which is white) but lead sulphid, and there is no such thing as "superphosphites."

E. C. H.

The Wassermann Reaction. Its Technic and Practical Application in the Diagnosis of Syphilis. By John W. Marchildon, B. S., M. D., Assistant Professor of Bacteriology, St. Louis University Medical School. Eleven illustrations and colored frontispiece. Price, \$1.50. St. Louis: C. V. Mosby Company, 1912.

The author of this brochure has written a very clear account of this important test in all its phases. Each step in the preparation of materials, performance of the test and the clinical interpretation of the laboratory findings is made the subject of a separate chapter.

E. C. H.

Sexual Impotence. By Victor G. Vecki, M. D., Consulting Genito-Urinary Surgeon to the Mount Zion Hospital, San Francisco. Fourth edition, enlarged. 12mo of 394 pages. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, \$2.25 net.

This book not only deals in a truly scientific manner with a very important subject, connected intimately with the happiness of mankind, but, without being lewd, it is written throughout in an intensely interesting style. The preceding edition was published eleven years ago; hence the author has found it necessary to revise and enlarge the text in nearly every chapter, even that on anatomy and physiology. About one-fourth of the text is devoted to treatment, which, it appears, may very frequently be successful, except in senile impotence, which "can never be the subject of rational treat-

ment, though one may sometimes pity an amorous old man." The author pays his disrespects to yohimbin and a number of other rather over-rated drugs. Albert Abrams furnishes for this volume a short report on psychotherapy, with particular reference to Freud's method.

Grave Danger in Osteopathic Treatment as Often Practiced. Dr. Charles H. Murray, of Elgin, Ill., a graduate of the University of Chicago and of the American School of Osteopathy at Kirksville, Mo., also the author of a "Practice of Osteopathy," has published a brochure (25 cents each, or ten for \$1.00) with the above title, designed to prove that only regular physicians should give osteopathic or other manipulative treatments, "as they are the only safe judges as to when such treatments are indicated."

He confesses that, although he has given more than 25,000 osteopathic treatments in the past six years, he has been afraid to have an osteopath who has had no medical training practice in his family, for fear of bad after-effects—and ill effects would certainly follow were they to be overtreated. He says that the theory, that misplacements of vertebrae cause disease, has been entirely overturned by osteopathic leaders, and he quotes from the *Journal of the American Osteopathic Association* in support of this statement.

Clinical Bacteriology and Haematology for Practitioners. By W. D'Este Emery, M.D., B.Sc., Lond.; Director of the Laboratories and Lecturer on Pathology and Bacteriology, King's College Hospital; Lecturer on General Pathology, London School of Medicine for Women. Fourth edition. Philadelphia. P. Blakiston's Son & Co., 1912.

This book is designed especially for practitioners who have had little or no training in pathology and bacteriology, but it contains considerable matter not to be found in other similar works; for example, the section on fluids from joints. The author describes tests and microscopic appearances tersely yet explicitly. A feature of the work which merits special praise is the practical application made of laboratory findings, as, for instance, the references to vaccine therapy under each bacterium considered. The ten beautiful plates (62 fig-

ures) which serve as a frontispiece to the text are admirable in every respect. Technical manipulations are further elucidated by 49 figures in the body of the work.

E. C. H.

Elementary Bacteriological and Protozoology: the Microbiological Causes of the Infectious Diseases. By Herbert Fox, M.D., Director of the William Pepper Laboratory of Clinical Medicine in the University of Pennsylvania. 12mo, 237 pages, with 67 engravings and 5 colored plates. Cloth, \$1.75 net. Lea & Febiger, Philadelphia and New York, 1912.

This handsome and beautifully illustrated little work should give nurses and beginners, as designed, not only correct information as to the nature, office and pathogenic relations of microorganisms, but is certain to so interest the neophyte in medicine as to lead him to pursue the subject of bacteriology further. The underlying purpose of the author has been to answer simply and clearly the question, "How do bacteria produce disease?" The general practitioner who wishes merely to be up-to-date in the literature of the subject will find this volume of reliable value.

The Principles of Human Physiology. By Ernest Henry Starling, M.D., (London), F.R.C.P., F.R.S., Jodrell Professor of Physiology in University College, London. Octavo, 1,423 pages, with 564 illustrations, some in color. Cloth, \$5.00 net. Lea & Febiger, Philadelphia and New York, 1912.

The author of this notably original and practical work says truly: "The only foundation for rational therapeutics is the proper understanding of the working of the healthy body. Ignorance of physiology tends to make a medical man as credulous as his patients and almost as easily beguiled by the specious puffings of the advertising druggist." It would be a good thing for every medical practitioner, at least once in ten years, to study carefully some very recent and exhaustive work upon physiology, and thereby keep abreast with the latest authoritative developments of this fundamental science. Professor Starling's volume excels in the comprehensive manner in which he collates the experimental data of physics, chemistry and physiology and applies conclusions to the everyday needs of the medical practitioner. For example, after discussing the dioptric mechanisms of the eyeball, a succinct de-

scription of the ophthalmoscope and of direct and indirect ophthalmoscopy is given. Considerable space is devoted to comparative physiology—a matter not only of interest, but of special utility in regard to the physiologic standardization of drugs. The author's manner of presenting each subject is full, clear and explicit; he is safely conservative, but not dogmatic. Typographically the book is of the highest order of excellence and is copiously illustrated.

ADDITIONAL PERSONALS.

Dr. Samuel B. Cohen has taken offices in the Metropolitan Building.

Dr. George E. Neuhaus was recently operated successfully for gallstones.

Dr. R. M. Kempton has returned to Denver after a pleasant visit in Kentucky.

Dr. G. Murray Edwards has just returned from a visit to the Mayo Clinic, Rochester, Minn.

Dr. Adolf Zederbaum, who left Denver for Europe three years ago, in a very frail state of health, has returned to this city greatly improved.

Dr. H. G. Maul is enjoying his post-graduate work in Chicago. He recently attended the meeting of the Mississippi Valley Medical Association.

The Joseph E. Shoenberg memorial building of the National Jewish Hospital for Consumptives was dedicated Sunday, Oct. 27th. The new building cost \$40,000 and will be devoted to school rooms and a library for the patients.

The American Surgical Association has appointed a committee, consisting of Drs. William L. Estes, South Bethlehem, Pa.; Thomas W. Huntington, San Francisco, California; John B. Walker, New York City; Edward Martin, Philadelphia; and John B. Roberts, chairman, 313 S. 17th Street, Philadelphia, to report on the Operative and Non-operative of Closed and Open Fractures of the Long Bones and the value of radiography in the study of these injuries. Surgeons, who have published papers relating to this subject within the last ten years will confer a favor by sending two reprints to the Chairman of the Committee. If no reprints are available, the titles and places of their publication are desired. John B. Roberts, Chairman, 313 S. 17th Street, Philadelphia.

MEDICAL PROGRESS—Continued

Medical Treatment of Cholelithiasis.—Dr. Paul Mayer, the well known Carlsbad physician (*Lancet*; *American Practitioner*), thinks that the majority of patients with gallstones should be treated medically. As stagnation of bile is the fundamental condition for the production of concretions, treatment should be directed toward expelling the stagnant, thickened bile by rendering it more liquid. This is effected by somewhat copious draughts of hot water, and by the injection into the intestines of large quantities of Carlsbad water, the patients retaining these for an hour if possible. The diet should be divided into at least five small meals daily.

Calcium Salts in Cardiac Weakness.—Gibson (*Lancet*; *Therapeutic Gazette*) has found the salts of calcium (chlorid usually) of marked efficacy for increasing the tonicity of the heart in simple cardiac weakness. In those who have disturbances of rhythm, the result of interrupted innervation, calcium bromid has proved of remarkable value; while in elderly patients with a tendency to degenerative changes in heart and arteries, calcium iodid is of at least equal importance. Both of these salts can be administered, alone or combined, in the form of elixirs.

Differential Diagnosis of Surgical Diseases of the Kidney.—Charles H. Robins (*Virginia Medical Semi-Monthly*, Sept. 27) discusses this subject in a practical way as regards hydro-nephrosis, ascending and hematogenous infections of the kidney, renal tuberculosis, stone and hypernephroma. Tumor is a prominent symptom in hydronephrosis (sometimes intermittent), and the later stage of hypernephroma; less palpable, if present, in the other conditions above mentioned. Pain is very marked in intermittent hydronephrosis (often with nausea and collapse)—only pressure pain in the continuous form. In pyelitis and pyelonephritis the pain, not severe, is felt in the kidney region and along the course of the ureter. In pyonephrosis the

local pain is of a dull, aching character. In hematogenous infections pain is most acute, attended with nausea and vomiting and simulating acute abdominal conditions. Pain is either absent or very slight in renal tuberculosis. Renal colic is characteristic of stone, extending from the affected kidney along the ureter, with retraction of the testicle and frequent desire to urinate. Kidney colic may also accompany the passage of a clot due to hypernephroma, which is otherwise nearly painless. Tenderness of the kidney region, particularly in the acute vertebral angle, is frequent in nearly all the conditions enumerated, but is most marked in the inflammatory diseases. Frequent urination is most characteristic of renal tuberculosis, which is often mistaken for cystitis. Pus and blood are absent in hydronephrosis. Pyuria is usually present in ascending and hematogenous (may be absent at first) infections. In tuberculosis blood is always present—likewise pus in small amount or more. Blood is always present, at least in microscopic amounts, in renal calculus, and pus is usually found in small quantity, unless the kidney should become infected. Cases of hypernephroma usually present a history of renal hemorrhage extending over a long period of time before other symptoms develop. Irregular, often high, fever is always present in acute pyelitis; in pyonephrosis the patient presents symptoms of chronic sepsis; and in pyelonephritis the temperature, delirium and coma are pronounced. High temperature, vomiting and severe abdominal pain are marked in hematogenous infection. In the later stage of renal tuberculosis, anemia, loss of weight and general debility become marked. Cachexia is developed comparatively early in hypernephroma. "By injecting the pelvis of the kidney with a solution of collargol and then having an X-ray plate, the contour of the pelvis is shown, which is of great value in determining hydronephrosis, size and location of kidney and the presence of tumor."

IN MEMORIAM.

William Harmon Buchtel, M.D., L.L.D., was born August 15, 1845, at Akron, Ohio. He was a brother of Chancellor Henry A. Buchtel, of the Denver University, who was a former governor of the State of Colorado.

At the age of sixteen he commenced the study of medicine under one of the founders of the American Medical Association, Dr. N. S. Davis of Chicago. At eighteen he was a surgeon in the United States army. At twenty he had finished his course in the Chicago Medical College, but could not obtain his degree until he was twenty-one.

In 1871 he came to Colorado and married Miss Helen Barnum, daughter of P. T. Barnum. For about a year he lived in Greeley and Castle Rock; since then he had lived in Denver.

He was one of the founders of the Gross Medical College and was professor of obstetrics for a number of years in this college, and later emeritus professor in the Denver and Gross Medical College. He established the Gross Midwifery Dispensary in 1892, and gave it financial aid.

Although he had been troubled with insomnia for some years, like most men who have passed the afternoon of life, he desired to die at his post. He expired in his office chair.

He was one of the gentlest and kindest of physicians. Probably no one could make a more gentle examination and treatment than he could.

His great kindness was especially shown in the care of his patients. He often made the rich wait while he treated the needy poor. If he had catered to the rich, he could have had a much larger wealthy patronage.

As an obstetrician his great skill was shown in the use of the forceps.

Like all true physicians, the death of a patient was a great shock to him. It is very probable that the death of one of his patients hastened his death.

While his relatives and friends are greatly grieved over his sudden demise, still they should feel glad that such an active man did not have to linger on as an invalid.

T. M. B.

UTAH SECTION

Denver Medical Times and Utah Medical Journal

Address all articles, personals, items of interest, and books for review, intended for the Utah Section, to the Editor, Frederic Clift, M.D., Ogden, Utah.

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Our prices on Reprints about cover actual cost. Those ordering Reprints must order at the time of revising their proofs.

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DR. FREDERIC CLIFT, Ogden, Utah.

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THE PHYSICIAN IN POLITICS.

The following circular letter has been addressed by the Davis County Medical Society to the candidates nominated by each of the political parties in Davis County, Utah:

Senator (Representative) Nominate for Davis County, Utah.

Dear Sir:—David Starr Jordan, in a recent address in Salt Lake City, said: "ISSUES PERTAINING TO THE NATIONAL HEALTH ARE OF FAR MORE IMPORTANCE TO THE COUNTRY THAN THE ISSUES TO BE DECIDED BY THE COMING PRESIDENTIAL ELECTION."

As voters of Davis County and watch guards of the public health, especially having regard to the dangers encompassing our youth of both sexes in consequence of our propinquity to the two cities of Salt Lake and Ogden, in which vice is admittedly an element of danger, with a resort and race course in our midst, we desire to know your personal views in respect of the enactment of laws to be presented following the lines of the four resolutions recently adopted by the State Medical Association.

The resolutions are as follows:*

- (1) A Certificate of Health before License to Marry.
- (2) The Sterilization of Criminals and Defectives.
- (3) Wilful Communication of Venereal Disease.
- (4) Gonorrhea Cures.

With a view to notifying our members and their friends of the views of yourself and the other candidates nominated for senator and representative of Davis County in the Utah legislature, we respectfully ask you to give us your views as to the necessity for the specific laws indicated by each resolution, and whether you personally will or will not support and assist in the enactment of such laws. If you approve of some and not all, kindly state which of them you will support. As the society will be holding meetings in the near future to consider these questions and the attitude of the candidates nominated, we trust to receive your early and favorable reply.

Respectfully submitted for your consideration,

FREDERIC CLIFT, Secretary.

*They are set forth in full in a subsequent article, "EUGENICS AND THE VENEREAL PROBLEM." q. v.

In our last issue credit was not given The Curtis Publishing Company for permission to reprint Frank Crane's "A Woman's Prayer for the Child to Come" from the Ladies' Home Journal. Copyright, 1912.—Ed.

THE MEDICAL INDEX EXPURGATORIOUS AND INDEPENDENT JOURNALISM.

The council of the Utah State Medical Association has decided that the proceedings and papers read at their recent annual meeting at Ogden are to be published in a Seattle journal, and not by a journal edited and contributed to by local physicians and circulating among the medical profession and scientists of Utah. The council, by their action, would seem to be afraid to allow the Association papers to be read by those outside its membership, and therefore hides them in a journal having no circulation in Utah and one which is not read or known to the profession of the state.

The only tangible reason advanced for such action was that the local medical journal allows advertisements to be inserted relating to drugs and medical supplies which have not been passed upon and approved by a committee of so-called experts appointed by the American Medical Association. The composition of this laboratory committee of chemists or near chemists is such that although recognizing their individual ability as chemists, they admittedly are not capable or qualified, and as a fact they do not attempt to make any **clinical** researches or tests as to the effect of such drugs upon "**sick humans.**" Failing such clinical tests, the findings of the laboratory committee of the A. M. A. are incomplete, although very valuable so far as they cover the ground of purity and scope of their contents. They cannot, however, be accepted **in toto** by the physician in actual practice, and he must therefore make the clinical tests for himself unless he is prepared to sometimes see his patient die because the laboratory committee is unqualified to properly complete the examination in the only practical way. The secretary of the Utah Association, whose researches apparently do not extend

beyond the pages of the approved list of drugs recommended by the A. M. A., sought to limit the advertisements in the Utah Medical Journal to the drugs, etc., approved by this laboratory committee, but in the interests of our subscribers and readers we absolutely refused to discontinue advertisements from our pages merely because they had been placed in the Index-Expurgatorius of the American Medical Association on the report of a partially qualified laboratory committee. We did, however, offer to investigate any advertisements which the Utah council might consider fraudulent or unethical, and if so found, we offered to discontinue same; but after careful search the council failed to name one such advertisement.

We believe our subscribers and readers will approve our action in claiming the right not alone for the physicians and scientists of Utah, but also for those in other states and English-speaking countries where our journal circulates, to judge for themselves as to what drugs, etc., they shall use in the exercise of the right given to them by the state or civil authority to minister to the sick and afflicted; as also the right to exercise their own judgment in making personal laboratory and clinical tests of the remedies they may decide to employ. The sick, unless they are insane—the class with which the secretary has had to deal—expect and have the right to demand that the physician who attends him will exercise his scientific knowledge in every possible way, including the reading of medical advertisements, whether approved or not by the A. M. A. This being so, the physician is bound to use his best judgment and the appropriate drug, vaccine or other remedy whether passed upon and approved by the American Medical Association or perchance by the Eclectic or Homeopathic associations, or found in the advertising pages of the Utah or any other independent

medical or scientific journal. One thing is clear: the physician cannot delegate his duty to his patient to a committee of chemists, whoever the personnel may be appointed by, or to the owners of advertisements found in independent or even state medical journals. **He must exercise his personal judgment** in the testing and selection of his remedies in order to acquit himself before God and man.

It is unnecessary to say that we turned down this irrational proposition, and that we go on our way fighting against "bossism" in our medical societies and for the "freedom" of our independent medical journals. We consider the suggestion an insult to independent journalism, and it is one we resent on behalf of our brethren of the independent medical press.

AMENDMENT OF ASSOCIATION BY-LAWS.

We congratulate the Medical Association of Utah upon its extended scope of usefulness. The amended by-laws provide in Section 3 of Chapter 7, after the words "the council shall be the board of censors of the Association," the following: **"And the executive body of the Association between sessions of the house of delegates, with full power to act."**

The Association from now on becomes a living body that can be appropos of Utah, in any emergency pealed to at all times by the medical that may arise, and the composition of the council, representing, as it does, all parts of the state, is such that its views and opinions will carry weight and be listened to by state and local authorities.

It has been suggested by one individual that the Journal has, by its recent articles, injured the Association and prevented members of the profession from joining the organization. We are sorry if our articles—like the surgeon's knife—caused distress to the

councilor, but the editor has been a member of the Association almost from its inception, and has always had its interests, as also the interests of the component societies, at heart. "By their fruits ye shall know them." What have been the fruits of our recent articles? Amendments which have placed the Association in the front rank of state bodies, and resolutions which are already receiving endorsements from state and other influential bodies of our citizens. The Utah Association now leads the other states in the power to act at all times in the best interests of the profession. Let the councilors see to it that the component societies get out, and rustle new members until by their efforts "every physician in every county of the state who can be made reputable has been brought under medical society influence."

EUGENICS AND THE VENEREAL PROBLEM—A QUINTETTE OF LAWS.

The Utah State Medical Association, representing the medical profession of Utah, has taken an advanced stand on this all-important question by the adoption of resolutions presented by Dr. Frederic Clift.

Our readers will remember that we took an active part in obtaining the passage of a law in the 1911 Utah legislature requiring the notification of venereal diseases. The basis of this law, since known as the "Utah Plan," has been adopted by several of our states, New York and New Jersey being among the most recent to fall into line.

The Charlotte Medical Journal, in a recent editorial discussing the "Utah Plan," feared it would not make good, but added: "These western commonwealths have a way of meeting difficulties with swift and effective remedies, and if this [speaking of evasions of the law] should be the result of the

present law, we may expect to see it followed by another. * * * We will find the man who contracts gonorrhea reported, and this, with the apprehension of publicity, will prove a powerful deterrent against illicit indulgence. The eyes of the world are on Utah. She has done a brave thing. What will be the result? Has her executive the courage and ability to enforce the law to meet the difficulties? If so, the other states will learn the lesson from her young sister."

These resolutions advocating further legal enactments for the control of the venereal plague are the "swift and effective remedies" for a somewhat lagging compliance with the notification law, and we believe that if enacted a long step will have been taken, not only to wipe out the danger to innocent wives and children, but to limit clandestine and public prostitution with all its concomitant evils. If the owner of a stockade could be made responsible for the communication of disease by those living under the shadow of her wings, the medical examinations now boasted of, and now little less than a mockery, would become effective, and no infected woman would return to her life of shame until the **recognized clinical and laboratory tests of scientific medicine** had proved her to be free from disease and its taints. Inasmuch as this would be almost impossible, having regard to the conditions under which these women live, the stockade would cease to exist and the women and their pimps would be compelled to seek another means of livelihood.

The resolutions presented at the recent annual meeting of the Utah State Medical Association were as follows:

A Certificate of Health Before License to Marry.

Moved, carried and subsequently approved by the House of Delegates:

That this, the State Medical Asso-

ciation of Utah, in annual meeting assembled, places itself on record as being in accord with the movement requiring all applicants for a license to marry to present a medical certificate showing him or her to be free from all venereal disease, said certificate to be sworn to by a licensed physician, who shall state that he has applied the **recognized clinical and laboratory tests of scientific medicine**, or by a member of a state board of physicians to be appointed by the State Board of Medical Examiners, one of whom shall be located in each county, and to be filed with the usual application for license to marry. **And we hereby instruct and authorize** the State Medical Council to appear before the legislature of this state, or any committees thereof, and to act for and in the name of this association in urging and supporting any measure that may be introduced into the legislature with the intent and design to require such certificate of health before marriage.

The Sterilization of Criminals and Defectives.

Moved, carried and subsequently approved by the House of Delegates:

That this, the State Medical Association of Utah, now in annual session assembled, places itself on record as being in accord with the movement favoring the **prevention** of the procreation of **criminals and defectives**, and desires to have embodied in the statutes of Utah a law for the absolute **asexualization** of criminals convicted of the crime of **rape**, and the sterilization of criminals who, by a succession of offenses against the criminal law, shall be deemed to be "of confirmed criminal tendencies," as also those who, by an established board of examiners or a judicial authority, are found to be **idiots, imbeciles, insane or epileptic** without probability that the condition of any such person so examined will improve to such an extent as to

render procreation by any such person advisable. **And we hereby instruct the State Medical Council** to appear before the legislative body of this state, or any of its committees, to act for and in the name of this association in urging and supporting measures that may be introduced into the legislature with the intent and design to prevent the procreation of **criminals and degenerates**.

Wilful Communication of Venereal Disease.

Moved and referred to a special committee and subsequently adopted and reported to the State Medical Council for action:

That this, the State Medical Association of Utah, now in annual meeting assembled, places itself on record as favoring the passage of a law making it an **assault** both upon the **individual** and upon **society**, and as such a criminal offense and a felony, for any person, male or female, to communicate any venereal disease to another person, the offense being considered wilful if an infected person shall not have obtained a medical certificate signed by a legally licensed physician of this state which shall state that he has applied the **recognized clinical and laboratory tests of scientific medicine** and finds the person named in the certificate to be free from all symptoms and taint of venereal disease. **And we hereby instruct and authorize** the State Medical Council to appear before the legislature of this state, or any committee thereof, and to act for and on behalf of this association in urging the passage of a bill to the above effect.

Gonorrhea Cures.

Moved and referred to a special committee, and subsequently adopted and reported to the State Medical Council for action:

That, with a view to the prevention of the disastrous effects to innocent

wives and children resulting from incompletely or uncured cases of gonorrhea, almost impossible to determine except by the clinical and laboratory tests of scientific medicine, this, the Utah State Medical Association, now in annual session assembled, places itself on record as favoring the enactment of a law prohibiting or controlling and regulating the sale in this state of patent or other medicines claiming to cure gonorrhea, as is done in the case of alcohol, opium and other articles held to endanger the public health and welfare if sold indiscriminately and without proper safeguards. And that it be made a misdemeanor to post or place "dodgers" or other bills or literature relating to venereal disease in or upon public urinals or other public or semi-public places. And further, it is of opinion that no pharmacist or druggist or clerk should prescribe or make up any prescription except the same be given and signed by a duly licensed and registered physician of this state, the same being dated within ten days of its being made up or compounded. **And we hereby instruct and authorize** the State Medical Council to appear before the legislature of this state, or any committees thereof, and to act for and on behalf of this association in urging the passage of a bill to remedy the conditions now existing.

CERTIFICATE OF HEALTH A PRE-REQUISITE TO MARRIAGE— STERILIZATION OF CRIMINALS AND DEFECTIVES.

These two subjects are engaging the attention of scientists and those interested in abolishing the causes leading to the necessity for a visitation of the sins of the fathers to the second and third generation. Moses, who was brought up in the learning of the Egyptians, imbibed, no doubt, from them much of the eugenical philosophy

embodied and found in the Pentateuch. Today those of us who seek to know the laws underlying the principles of eugenics should make a deep study of the book of Leviticus. The Jews of today, notwithstanding the fact that they have been outcasts amongst the peoples of the earth, and that they have only too frequently been compelled to live in the most squalid and disease-laden districts of our large cities, are a healthy race. Why? Because they have faithfully followed and practiced the social and hygienic laws given to them by their great law-giver, Moses, some 3,400 years ago.

During the past century there has been a great recrudescence of eugenic thought. The peace following the Napoleonic wars turned the thoughts of the people into other channels. The discovery of steam, the wonders of electrical and allied sciences, opened up the way for the great progress of the nations in the arts and sciences. But peace has brought some disadvantages. Armies, as a rule, are composed of the idle (rich and poor) and the dissolute—the criminal and defective—the drinker and the diseased. These were sent out to fight the enemies of their country, and their country was saved the expense of maintaining them in asylums and detention homes. Many of them were killed off or so disabled that they did not propagate their kind. Peace has her victories, amongst others the fact that the average duration of life has been increased by some fourteen years; but, at which end? Amongst the barbarous as also amongst the highly civilized nations of the past, such as Greece and Rome, the doctrine of the "survival of the fittest" prevailed—the weaklings and the degenerates, if not actually put to death, were placed in such environments that they did not live to become a charge to the state. Now, however, these weaklings and degenerates, who should never have been born, are only too often the pampered

protéges of the state, residing in palatial homes set apart for their use, with but little restraint placed on them on their release to prevent their propagating more of their own kind, who, in turn, will perpetuate their defectiveness and diseases not alone to the third and fourth, but through occasional infusion of purer blood to the "nth" generation. The fact that these weaklings are saved from an early death largely furnishes the key to the statement that the average duration of life is being so greatly increased. Statistics show that hereditary taints are being multiplied with a resulting increase of insanity and criminality accompanied by a remarkable growth of social immorality and its accompanying diseases—syphilis and gonorrhea.

How are these evils to be met? We cannot go back to the methods of the past and deliberately put to death the unfortunates who should never have been born. If born, they are entitled to sympathy and consideration, but it is our duty to see to it that the **idle and the dissolute, the criminal and the defective, the habitual drunkard and the sexually diseased**, do not "bring forth living creatures after their kind." They have forfeited their right to burden the state by the procreation of those like unto themselves. They should not be allowed to marry, and to provide against their seeking illegitimate unions, they should be sterilized. The methods and limitations are matters for our legislators to consider. It is our duty as scientists to express our views and to impress those we send to the legislatures with the seriousness of social conditions as they exist today. We congratulate the State Medical Association upon the stand they have taken in adopting resolutions favoring laws aimed to prevent the existing evils. Let us, in our county societies, be up and doing. Let us promote public meetings and resolutions thereat and let us not forget to educate the clergy and those who min-

ister to the unfortunates who are in our midst. They have been brought into this world by unwise parents. They are the ones to blame. Let us educate our children, the rising generation who are to be the fathers of tomorrow.

THE UTAH W. C. T. U. ADVOCATES A CERTIFICATE OF HEALTH BEFORE MARRIAGE.

The twenty-second annual convention of the Utah W. C. T. U. was brought to a close by the adoption of a resolution indorsing the Utah State Medical Association's attitude toward preventing the physically unfit from marrying. The Union pledged itself to assist in the enactment of such a

law should it be introduced in the legislature.

A CERTIFICATE OF HEALTH BEFORE MARRIAGE.

Those in good health would no more mind the examination than they would the one demanded by insurance companies—only the diseased could object and it would make them more careful than they are at present.

The education feature would make mothers, father, brides and grooms all concern themselves. They would learn to realize certain dangers that are not now dreamed of. The romance of marriage would not be affected if such a certificate were demanded of all. It would not cast a reflection upon either party.

THE NATIONAL LEAGUE FOR MEDICAL FREEDOM AND ITS SUBSIDIZED NEWSPAPERS—THE GREAT INDUSTRIAL AND ECONOMIC ICONOCLASTS OF THE CENTURY.

By DR. A. S. CONDON,
Ogden, Utah.

"My Lord, it is not a profession, not a nation; it is humanity which, with uncovered head, salutes you."

These were the words of a just appreciation that fell from the lips of Her Gracious Majesty, the Queen of England, when she raised Joseph Lister to the peerage and he became a baron. He was the first and only baron created from the medical profession, and the title was well deserved.

Beside his in the catalogue of fame are the names of a multitude whose lives were consecrated to the amelioration of human conditions in every way and wherever found, and when these were summoned from the stage of action others, inheritors of their genius and inspired by their example, have taken up their unfinished tasks and are seeking with unwearied eyes and hands the magic sceptre that shall one day cast out from the blighted home the specter of disease and indefinitely postpone death itself, and they ask no applause from the otherwise busy world.

I am aware that much I shall say here may seem trite and commonplace to you who are familiar with the history of medicine and its parallel purposes since the dawn of civilization; you have followed their slow and often interrupted progress from the days of Hippocrates and his delightful aphorisms, but the laity are not so informed, and it remains for us to enlighten them, that, with lifted eyes they may see and know the truth. Let us pause here in the beginning long enough to make clear to the uninitiated the seemingly pretentious title to this paper that they may understand. The National League for Medical Freedom is a lofty-sounding phrase appropriated by certain human sharks with plenty of money (how acquired will be shown further along) to impose on the credulity of unsuspecting people.

The expression is a misnomer, because it does not mean what it says, but it seems rather to be a national league to lay tribute on laudable undertakings, to destroy en-

Read before the State Medical Association, Ogden, Utah, September 24, 1912.

viable reputations, and to get wealth and power regardless of how it may be obtained. In fact, it is best illustrated by a familiar quotation that originally must have been devised for this very purpose, namely, "they steal the livery of heaven to serve the devil in."

The newspaper should be, and many are, the dynamo of progress, the masterful lever that moves into action the thought of the world, the heralds of civilization, if you will excuse my mixed metaphors, but, more's the pity, all are not so utilized, for these sell themselves body and soul to any cause for money, and influence gained thereby, and become the 'pilot fish' that leads the shark to his prey. We will return to this part of our subject after a bit.

The Captains of Industry and promoters of Frenzied Finance may point with exultation to the keels of their commerce that plow every sea, but the self-denying wizard of science is content to pursue his untrumpeted way in the grim laboratory, that the acquisition of health and her hand-maiden, Prosperity, may be the heritage of future generations. Think for a moment what those invincible minds have wrought, and then comprehend, if you can, what the intolerable sanitary and industrial conditions would be if the National League for Medical Freedom and their allied newspapers had then existed to neutralize the work of those philanthropic martyrs to the cause of our civilization! They had difficulties to overcome, God knows, but theirs were ignorance and superstition in the days that had never seen the light, and not the power of organized wealth as we have it now—the most intoxicating and dangerous doer of evil since history was written.

Smallpox, subjectively, is now interesting only as an historical reminiscence, and yet prior to Jenner's discovery of vaccination, and later where that prophylactic is disregarded, it was and still is what the great Macauley called it, "the most terrible of all the ministers of death." In two years half a million of people died of that loathsome disease in Bombay and Calcutta; three thousand died annually in France; fifty millions perished in Europe during the century preceding Jenner's discovery, and I might keep on for an hour with the gruesome recital. The mind becomes confused when it tries to grasp these figures, but it will help some to appreciate them

when we remember that each death represented an extinguished light in some home of breaking hearts, for affection was a sweet bond in those centuries long ago as much as it is in ours of today.

But it is gratifying to know that it was a member of our guild that challenged the destroyer and wrote over its door: "Thus far shalt thou go, and no further." These are not boastful words I speak—I but recite history. But there are miracles other than vaccination, and great names other than Jenner's written with unfading ink across the page of achievement that is guarding the portals of home against the invasion of disease and death.

Let us locate some of the stars in that splendid galaxy and live for a quarter of an hour in the light they shed, lest we forget. And, if it be true, as we love to believe, that the spirits of the dead do participate in the cares and concerns of what was most dear to them here, let us also believe that invisibly they are with us tonight, sharing with us the deliberations of this meeting, and bidding us Godspeed in the work to which we have dedicated our lives. But time will permit mention only of those who have set signal stations along the highway of real greatness—beacon lights to guide the enquirer, and to distinguish that road from all others.

Soon after the Christian era there came Galen, physician to Marcus Aurelius. Galen was the first to differentiate normal and morbid conditions by dissecting human bodies and other animals at his schools in Corinth and Alexandria. He was the first to observe the pulse relation between natural and pathological modes; was the first to discover, if discovery it may be called, that disease is contrary to nature and must be overcome by that which is contrary to disease itself, in contra-distinction to the more recent dogma of "similia similibus curantur."

Now we glide down the centuries that are dark and misty till we come to the name of Harvey. Harvey was first to demonstrate the circulation of the blood and thus justify the theory of Galen. Linger along, I see the name of Hunter, who gave to surgery a lesson in the cure of aneurism that has never been improved, namely, the tying of the artery between the tumor and the heart, and this in turn demonstrated the circulation-theory of Harvey.

Crowned with a halo all their own, I see Simpson, Morton and Crawford W. Long, the great triumvirate that charmed the bed of pain with the wand of anesthesia. Naturally enough, we now come to Marion Sims, the first to suture a vesico-vaginal fistula with wire, which obviously could not have been done and adequately treated subsequently without anesthesia.

Close on the heels of Sims' triumph under cover of anesthesia is McDowell and his successful ovariectomy, the first ever performed. He was pointed out as a dangerous man on the day he operated and threatened with violence, so little did the world comprehend the genius of the man or the great boon conferred on womankind. It is a common operation now and an ineffable blessing.

And here, rising before us, is a familiar figure beaming with a spiritual transfiguration, and a face that we all love to recognize—the genial Autocrat of the Breakfast Table. Dr. Oliver Wendell Holmes was a professor at Harvard, poet, scientist and humanitarian. It was he who first taught that puerperal fever was communicable from individual to individual because of a specific germ. That seems a very simple fact now, but attendants since the first child was born were wont to go from a mother dying of puerperal fever to a case of amputation and manipulate with the same hands that an hour before had removed an infected after-birth from a stricken mother. Pasteur had just discovered that infection was caused by a specific germ common only to that disease, and Holmes discovered that puerperal fever was an infectious disease. The thoughtless might be surprised that this important but rather familiar information to us now lay for centuries hidden from sight. But where was McCormick's wonderful harvester when men reaped their fields with a sickle? It was this same Pasteur who, by timely investigation, discovered and destroyed the pest that had devastated the vineyards of France and touched with its blighting finger the fertile continent beyond.

Looking out of the picture before us we see the faces of Klebs and Loefler, who banished from the chamber of despair the ghoul of diphtheria. Gazing from this same page of the immortals, we behold the strong features of Carroll, and Lazear, and Reed,

and Agramonte, four men greater than were Julius Caesar and Alexander and Hannibal, and Scipio; for these were determined on the destruction of life and happiness, while the others devoted their whole being to saving life and making it the more worth to live. They drove the yellow fever from Havana and our Southern ports, once the lazaretto of the King of Terrors, and made them delightful places of abode; and two of them—self-sacrificing victims—are invisibly present tonight listening to these poor words of mine.

But we must not forget the splendid McClintock, who only last month went down to his death in the full bloom of manhood as a glorious ship, freighted with the treasures of the world, and while the glad winds of promise are kissing her bellying sails, goes on to the hidden rock and disappears. McClintock sickened and died while investigating the cause and in the home of spotted fever in Montana, our sister state. He had practically consummated the object of his quest when stricken with the infection. Like Moses of old, he was permitted to view the promised land, but was forbidden to enter in.

And there is Maus, the first Commissioner of Public Health in the Philippines. When Maus arrived in Manila, a city of nearly three hundred thousand souls, he tells us in an interesting address before the Physicians' Club of Chicago, he found it the hot-bed of bubonic plague, leprosy, smallpox and Asiatic cholera. Not a sewer had ever been dug nor a quarantine established. The sick and well lived together and slept in the same bed. The Filipinos had been taught that these diseases were not to be dreaded or avoided; that they were penances for religious derelictions, and sent by the Almighty for that purpose. They were taught to believe that when they fell sick the Evil One was punishing them for their sins; that the pain and suffering would deliver them from any future penalty.

I say, how like the Guide to Health, by Mrs. Eddy, or the works of the National League for Medical Freedom, does all such rot seem to thinking people! At once Colonel Maus instituted a Board of Health in civilized fashion and compelled a wholesale vaccination. In two years smallpox was practically eliminated from the islands. The Spanish friars, who were the cause of all this superstition and suffering and ini-

quity, and the National League for Medical Freedom seem to be tarred with the same stick. They teach these things for money and power, and their subsidized papers rake off their share of the thirty pieces of silver. They make their appeal to the gudgeons that swallow the bait without looking, regardless of crowded graveyards and the Rachels that go about the streets mourning for their children and will not be comforted.

I say they appeal to the weak and ignorant, for when the light of knowledge breaks into their benighted minds the occupation of those human vultures is gone. Suppose a newspaper should print a live editorial in favor of the so-called Owen bill, or the Pure Food law—but against quackery and the patent medicine nostrums—how long would that paper live? True, all the newspapers are not mortgaged to these vampires by any means, for there is the New York Sun, Collier's, The Portland Oregonian, and many others; these have financial backing and a conscience, and are not afraid.

During my professional life the medical faculty and their collaborators along congenial lines have lengthened human life nearly twenty-five per cent; have discovered and developed antiseptic specifics that have made possible the wonderful successes of modern surgery; have rendered harmless the exploration of the brain, chest, abdomen, heart, lungs, esophagus and other vital organs that would have been deemed madness a score and a half years ago; have discovered the tubercle bacillus, and are on the trail of cancer. Child-bed fever, that awful peril of maternity, has been abolished, and the Golgotha of the Canal Zone has been converted into a garden of Eden. The death rate of ovariectomy has been reduced from sixty-seven to three per cent, yellow fever has met its conqueror, and the mortality of hydrophobia has been reduced from seventeen to one-fourth of one per cent. The utility of the transfusion of blood has been established, and an instrument for the better administration of medicine has been invented. The terrible scourge of diphtheria has been practically eliminated, the extirpation of goiter has been rendered safe and little dreaded by the patient, and old men are comforted by forgetting they ever had a prostate gland. Professor Schaffer of Edinburgh is now demonstrating, or expects to

demonstrate, the discovery of the origin of life and how to prolong it indefinitely, and Loeb of Chicago has been for several years sedulously busy in creating an artificial frog, a frog entirely independent of natural progenitors; but possibly science is carrying this thing a bit too far, for when they seek to produce life artificially, there will be dissatisfaction, but the proprieties forbid that I go farther into detail at this time. I have left Roentgen and his bewildering machine to the last that I might set it on a pedestal alone by itself. To make an instrument that will illuminate the human body in its darkest recesses and show what is there seems to be the limit of daring, but it is true, and the end is not yet. And so for hours could we continue the recital of benefactions conferred on humanity by the medical profession and their kind since I began the practice of medicine.

O, this is a great day of possibilities for the live physician working side by side with the scientific specialist! The sun of his enterprise rises higher and shines brighter than ever before! He beholds the unexplored fields of knowledge stretching away into the mysterious distance, and his heart is eager to reconnoiter! His genius is scrutinizing every realm under the sun and his soul cries with rapture, "Verily, the world do move!"

And now, how many of these miracles for the common welfare have the National League for Medical Freedom and their subsidized newspapers wrought? Not one! But rather, they have been a brake on the chariot of progress. Not a human life has been saved by them; not a discovery for the abatement of disease and death; not a lamp has been lighted in the darkened chamber with a ray of hope.

The National League for Medical Freedom, through their subsidized press, appeals to the vicious and ignorant with plausible insistence. They saturate the reading public with truthless inventions for the purpose of prejudicing that public against those who strive for the welfare of the state and its people. Their bought newspapers daily reiterate that the medical profession—and that includes our homeopath brothers—is a medical clique organized for the purpose of personal gain and a selfish control of all laws pertaining to the practice of medicine. Mr. Job P. Lyon, a Salt

Lake City attorney, declares in a Salt Lake paper, over his own name, that he is the secretary and treasurer—in other words, the leech of that delectable cult—and I give him this advertisement gratis. He says, further, that it has nearly three thousand members in the state of Utah; that the purpose of the Owen bill is to employ only a certain class of physicians when sick; that it is gotten up by themselves in their conclaves to exclude all others from the sick room, and a lot more such stuff, till the stomach of normal intelligence revolts at the recital.

Mr. Job P. Lyon and his pack of hungry wolves ought to know, for children in the eighth grade do know, that the constitution of their country forbids the general government to interfere with the functions of any state, and the practice of medicine is one of the state functions. Mr. Job P. Lyon knows that Dr. Wiley did not object to the benzoate of soda because it was harmful to the human stomach when taken in small quantities, but he did object to it because soulless packers of foodstuffs employed it to disguise and render palatable their slaughtered beeves and hogs that were reeking with putrefaction.

The struggle in the interest of the public health and against misbranded and adulterated foods and drugs has been going on for an hundred years, but every movement has been met by various communisms of greed. But at last we have had the so-called Owen bill before Congress, and the National League for Medical Freedom poured out money like water to defeat its passage, and their subsidized newspapers were their mouthpieces. And pray, where do they get that money? They get it from the manufacturers of patent medicines; from the makers of drugs who are wicked enough to misbrand both the quantity and quality of the carton, and from the promoters of foodstuffs that are doctored to go on to unsuspecting tables to poison the diners there, when they have disguised the taste and smell of the putrefying stuff. This is the practice in all the large cities, and in other places where it may be safely done, except, of course, here in Utah.

But let me tell those who do not know that the sole purpose of the Owen bill is to have everything connected with the public health and that is under the control of the Government at Washington, made into one department, as is the Department of State, the Department of the Interior, and the others, and have it presided over by one chief executive, and not have it scattered over eight divisions, as it is now. It does not create a single new bureau or

division, but simply collects into one those already existing.

But the National League for Medical Freedom and their subsidized newspapers are moving heaven and earth to block that legislation; to turn back the dial of Time to when men took omen from the constellations and the husbandman plowed his fields with a heifer and a crooked stick. They would wipe from the splendid pages of achievement the benefactions that I have recited, and make the fertile fields of this century's scientific hope a howling wilderness of ignorance, superstition and despair. These predatory wolves in search of the rotten carcass of wealth and power, and led on by such men as Job P. Lyon, assume the God-given right to plunder the helpless sick; to force into hungry mouths unwholesome foods and drinks, and to throw open the gates of prosperous cities when pestilence knocks unhindered for admittance.

But the strong arm of the law must bar the way, and it remains for us, the medical profession of all the educated schools of whatever name, to educate the people to their own interests that future generations may reap a better harvest and more abundant than did their fathers and mothers. Petitions to the National League for Medical Freedom and their allied newspapers offer no encouragement; as well might the helpless lamb appeal to the hungry wolf.

It is with sorrow and humiliation that I remind you that the late Republican convention, at its meeting in Chicago, utterly ignored the question of the public health; I say it is humiliating to me, for to that party I have held a true allegiance all my life and had been taught at the fireside of my boyhood that the Republican party from its birth has stood for all that is wisest and best in human government, and I have believed it. And now to read in the dispatches that the delegates in that convention could putter for days over a man's right to a certain seat and never give a thought to the stricken cry of the multitude to release them from the iron grasp of millionaires grown rich and oppressive by selling them poisoned foods at exaggerated prices, blots out the rainbow of my early dreams.

Education must be the keynote of the crusade in behalf of the public welfare that out from a refined and prepared constituency may go honest and discerning legislators to enact laws for the benefit of a whole state and not for a favored few, for it is manifest that a stream cannot rise higher than its fountain head.

DEPARTMENT OF EUGENICS

EDITOR

FREDERIC CLIFT M.D., LL.D.

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The purpose of Eugenics is to cultivate virtue and disarm lust; to ennoble the home, and to protect womanhood; to restrict love in the true sense of its meaning and brand sensuality with the deterrent elements of the race. To this end Eugenics advocates the higher education of women; the higher respect of manhood for womanhood; the industrial emancipation of woman; the elimination of prostitution; the control of venereal diseases; the regulation of marriages; uniform divorce laws, and the equal rights of woman in every human endeavor."

Havelock Ellis, in his "Problem of Race-Regeneration," says:

"Tramps, by nature and profession, who overlap the workhouse population are everywhere found to be a very degenerate class, among whom the most mischievous kinds of feeble-mindedness and mental perversion prevail, as well as the tendency to petty criminality and sometimes to more serious crime. Inebriates—the people who are chronically and helplessly given to

drink—largely belong to the same great family, and do not so much become feeble-minded because they drink, but possess the tendency to drink because they have a strain of feeble-mindedness from birth. Dr. Branthwaite, Home Office inspector and the chief English authority on this question, finds that of the inebriates who come to his notice, putting aside altogether the group of actually insane persons, about sixty-three per cent are mentally either "defective" or "very defective," and scarcely more than a third of the whole number of "average mental capacity." It is evident that these people, even if restored to sobriety, would still retain their more or less inborn defectiveness, and would remain equally unfit to become the parents of the coming generation. These are the kind of people—tramps, prostitutes, paupers, criminals, inebriates, all tending to be born a little defective—who largely make up the great degenerate families whose histories are from time to time recorded. Such a family was that of the 'Jukes'."

SOME CHILDLESS WIVES.

DR. G. HENRI BOGART,
Paris, Ill.

In the course of my work for the last four years, in the general line of eugenics and social purity, I have had a large private correspondence which has resulted in the sending to me of quite a number of women, nearing the menopause, for an opinion as to their sterility.

From these cases I have selected a number of the types that will illustrate various phases of this prevalent and regrettable feature of our higher civilization.

No practitioner who has the human sympathy that will be spontaneously recognized by those about him, and who is thereby

made the recipient as father confessor, but has met these cases, and if he have not this innate power of standing as the receptacle of the confidences of others, he is unfit for the higher planes of the practice of medicine.

My first case is one that involves more of the ethical and of the equity of the rights of the individual, as related to others, and to the communal good, than any other one that I have ever seen.

The woman is about forty and she has been married half her life.

She is a creature of deep sensibilities,

finely educated, a splendid housekeeper, and an equal partner with her husband in business matters—in a word, she is a strong, womanly woman, one best equipped by natural traits, by development of her powers, and by surroundings, to mother the citizens of which the world most stands in need, and which communal well-being is justified in demanding that she shall bring forth.

The intensity of her maternal instinct was best shown by an incident which occurred when first I saw her in her home some years ago. As I sat with her on the verandah of her beautiful home, a slatternly woman carrying a sore-eyed, squalling baby, limply as a cat would carry a kitten, passed.

She forgot her speech in the middle of a sentence, and, as her breath came in gasps, her form became rigid as her eyes followed the child with a wild intensity that was painful to look upon. As the mother passed out of sight around the street corner, she shuddered and sank back and whispered, "Doctor, doctor, try and tell me something. I would gladly surrender my hopes of heaven to call that baby mine."

I called her attention to its unlovely hereditry, and she answered that love would work wonders, and that a shield of good environments could be builded about it that would cover and smother its bad lifelines.

I was unable to solve the question of her sterility, and with such stock instruction to the woman and her husband—who shares, man fashion, as much as is given mere man to share, her desires—as I could think of, I dropped the matter with a few sad thoughts of the inequalities of the distribution of the gifts of the world. I had lost sight of the couple when a call came for assistance from the husband. It seemed that he had been away from home on an extended business trip, and that he had come back with an obstinate gonorrhea. He was man enough to tell his wife his condition, although he ascribed the infection to sleeping between soiled sheets, and she believed him. When his physician failed to relieve him a letter was written me, and it diagnosed the conditions described as a new infection superimposed upon a latent case, and refused to give any advice unless there was absolute confidence shown by a frank history of a previous infection.

The result was a confession to an infection a year before his marriage, with a quick drying up of the disease and some little rheumatic and heart trouble, neither of sufficient gravity ever to have required professional treatment.

A constitutional treatment of the arsenic and calcium sulphides was recommended with good results, as the microscope showed final freedom from the gonococci.

Accidentally, another discovery was made by the microscope—the husband is sterile, probably through occlusion of the vas deferens. At any rate, there are no spermatozoa in his semen.

My original investigation of the woman's sterility had been directed toward the wrong party, and at that period I had not learned nearly so much as I now know after some years of special investigation. I had made a natural mistake, though I now suspicion the male more than the female in all such cases.

Now for the third step in the all too common domestic tragedy. The woman has written me and pointedly wishes to know "Would I be likely to have a baby with another mate?"

All the indications are that she would, but I have withheld an answer to that effect.

She is desperate in her desire for a child.

She would have but two avenues open to her—one by illicit sexual relations, in which she would breed herself as is done with the domestic animals, or she could secure a divorce and remarry.

Her marriage has been a farce insofar as its primary object is concerned; it remains a farce, and must so continue.

Whether she could substantiate the facts in a court of law should her husband be inclined to dispute the matter would be problematical.

She knows that her husband was not continent prior to marriage, and I think she is positive that he was untrue when he was last infected, though she, with rare loyalty, professes to believe his story of the 'dirty sheets' and to scorn to consider that he certainly found a companion between those same sheets.

I have withheld a positive answer, as I do not wish to shoulder the results likely to follow my giving of the facts.

On the other hand, she has the absolute

right to bear offspring, and that right has been denied her.

Doctor, I am asking no advice, but I am asking that you put yourself in my place and consider what is the right and the wrong in the matter. What would you tell her?

Recently I read a paper in a journal in which a noted writer said that he wished that the journals would devote more space to the reports of cases and treatment, and less to fads, fancies and side issues, such as sterilization of degenerates, since such matters belong to the psychologists and the legal fraternity.

He says that all the space which the journals are devoting to the consideration of prostitution and its effects is worse than wasted since all that the profession has to do is to cure those who get into difficulty through such channels.

Fortunately for humanity and for the profession as well, the best endeavors of medicine are now prophylactic, and we are to minister to the soul that dwells in the body as well as to its tenement, the body; indeed, unless we dealt with the body through its relations with the spirit, we shall not get very far. I think this woman's marital tangle as purely a case for intelli-

gent medical study as I do that of any measles, and more so than the average treatment of a typhoid. What do you, reader, guess that she will do if the truth be told her?

We vaccinate to prevent smallpox, relatively harmless, and we quarantine the few cases which do arise, while the more terrible disease, with its horrible train of woe with wrecked homes and lives, is suffered to run its foul course unnoted, as though we were to go into the garden and kill the toad because he is loathsome, the while we carefully hide the deadly rattlesnake for fear he be seen.

This woman's case is not one of dozens, nor yet of hundreds, but of many, many thousands, and the only state that has undertaken to curb the horror of it all is Utah, and there are some of the best of the profession who are honestly clinging to the past and fighting the "Utah Plan."

This man who has done this terrible thing to the wife whom he loves, did it without knowing, and had there been a law that would have compelled him to be free from venereal infection and fitted to assume the marriage contract without his powers being bankrupt, this story would never have been written.

THE PREVENTION OF THE INCREASE OF INSANITY OF THE PROCREATION OF THE CONGENITALLY DEFECTIVE AND OF THE CRIMINALLY DISPOSED*

By DANIEL PARKER, M.D.,

Calvert, Texas.

Gentlemen of the Texas State Medical Association:

I desire to call your attention to a subject of the utmost importance to every citizen of the state of Texas, and that is the rapid increase of the number of the insane, and also that of the propagation of the congenital defective, as well as those with hereditary criminal tendencies.

The rapid increase in the number of the insane is alarming and largely out of proportion to the increase in our population. Our hospitals for the insane now cost the state close to the million-dollar mark an-

nually, with the certainty of a steady increase unless present conditions can be changed. This lamentable state of affairs calls for the serious and earnest attention of every thinking man, and unless the attention of our legislature can be effectually called to it, and means adopted to prevent in some measure the propagation of this class of defectives, it seems inevitable that the state will eventually be overwhelmed. This is a brief and, I trust, sufficiently comprehensive statement of the condition to which I wish to call your attention.

Let us first mention the law of heredity,

*This paper was intended for the section on State Medicine, to be read at the Waco meeting of the Association in May, but was not received in time. By special permission of the editor of the Texas Medical Journal.

which we might properly style "the first law of nature," since it was promulgated in the garden of Eden by the Great Creator, who decreed "That the earth bring forth the living creature after his kind." Whether this was really a divine decree, or the recording of a fact already established at that remote period, matters not; universal experience establishes the fact that "like produces like."

It is sufficient for the purposes of this paper to consider this law only as it affects the transmission of disease, and of abnormal mental and physical characteristics. The problem of caring for defectives and balancing the forces of environment and education so as to overcome a hereditary tendency does not come within the scope of this paper. We seek to prevent the propagation of this class, to eliminate them, so far as it is possible, from the human mass, to prevent them from being born. In the more primitive conditions of society the law of "the survival of the fittest" virtually accomplished this object. The weaklings, the degenerate, not being able to withstand the rigors to which they were subjected, did not live to become a charge to the state, or to propagate their kind. In our higher state of civilization the pendulum has swung in the opposite direction. Our improved hygienic conditions and better methods of treatment have taken weaklings that should never have been born and rescued them, to become a charge to the state, and, still worse, to add the burden of their defective progeny. This, in my opinion, largely accounts for the disproportionate increase of insanity.

I have no patience with the idea that it is good policy or good morals to permit, so far as it is impossible to prevent it, the burdening of society with such as can only become a charge upon the public, and of unhappiness to themselves. If unfortunately such are born, they are entitled to sympathy and consideration, but they never should have been born, and, being born, they should not be allowed to lay additional burdens on society by the procreation of their kind.

Population is only desirable when it is of the right kind. While a healthy, normal child is an asset to society, a degenerate is a liability.

In regard to insanity, I believe that it is

estimated that three-fourths of the insane have a hereditary taint which has finally brought them to some hospital for the insane for treatment. What a relief it would be to society and the state if the propagation of this class could be prevented! It is not contended that insanity can be prevented, but it is contended, and susceptible of proof, that the sterilization of this class would immensely relieve this unfortunate condition.

Criminal tendency is a species of insanity. Hardly anyone will contend that a well-balanced and normal mind would incite to commit crime. The physicians' records at the New York State Reformatory show that two-fifths of its inmates are mentally defective. This tendency, of course, may be more or less marked according to what might be called the degree of mental deformity, but the relief would be incalculable, if the propagation of this class could be prevented. The famous case of the Jukes family, where "Margurett, the mother of criminals," a half-insane prostitute, had criminal descendants numbering several hundred, whose careers of crime included murder, thieving and prostitution. Further than that, no doubt, a criminal tendency developed in many of her descendants who themselves were considered respectable.

If the ancestry of many of our criminals could be traced, unquestionably a vicious hereditary tendency could be found, perhaps cropping out after many generations.

The rational treatment of the congenital defective is equally obvious. Our state schools for the blind and the deaf are largely composed of descendants of defectives. These people receive their education, go home to marry, and in due time send their unfortunate progeny back to the state institutions, where they receive their education. If the congenitally defective could be eliminated from our population, these eleemosynary institutions would require very little assistance from the state, and society would be relieved of considerable burden.

All of these conclusions are sufficiently obvious. It seems almost Utopian, after submitting to this unfortunate condition from time immemorial as unavoidable, to hope that the hydra-headed evil of insanity, crime and congenital deformity can be

successfully coped with; yet, in a properly organized state of society, it would be the simplest of all our social problems. These people should not be allowed to propagate their kind. No more of them should be born.

Sterilization by means of vasectomy is the remedy. That it is a remedy is not to be questioned, and all objection to it is purely sentimental. It deprives the subject of no power except that of procreation, which is the object we seek to accomplish.

So far, I have considered this subject only from the standpoint of public policy, but the advantage to the subject is equally obvious. No doubt many an intelligent person who recognizes some hereditary defective tendency hesitates to enter into the marriage state, fearing defective progeny. If such a person could be assured that there would be no progeny, this relation could be entered into safely, and two persons could live together in conjugal happiness, with all the pleasures thereunto appertaining. Surely this is no mean consideration.

Another aspect of this operation, as it affects the criminal subject, is that it improves his general health, and renders the criminal tendency less dominant.

Dr. Woods Hutchinson states, in an article in *Everybody's Magazine*, that out of one hundred and six men set at liberty on parole, after being subjected to vasectomy, only five relapsed. This is a fine showing. Among the violently insane this operation has had the effect of quieting the subject and rendering him much more manageable.

It is often said that there are two sides to every question. To me this seems an exception. So far as I can see it, it is all for and nothing against. I hardly need describe this operation to this body. It is simple, without danger, practically painless and absolutely certain to accomplish the object for which it is designed.

The outline of a law on this subject should be, in my opinion, something like this: All paroled and discharged patients from our state hospitals for the insane, with perhaps a few exceptions, should be sterilized before leaving the hospital. Certain classes of criminals should be submitted to the operation before being discharged or paroled, and no marriage license should be issued where either party has a congenital defective taint, unless one of the

parties is sterilized. This is merely an outline.

Several states have already enacted laws on this subject. Indiana took the lead in 1907. Connecticut followed in 1909, and the province of Ontario in 1910. Other states have also legislated on this subject. The question now is: Shall Texas join the progressive column?

I introduced a bill in the last legislature legalizing this operation in a certain class of cases, but owing to political wrangles, and to some extent to my inexperience, it died on the calendar.

I hope to make a second attempt to procure legislation on this subject in the next legislature, and my principal reason for wishing to bring the subject up at this time is to try to induce every member of this body to urge his local senator and representative to give this matter serious consideration.

[NOTE—Dr. Parker, ex-county judge of Robertson County, is representing that county in the legislature. The whole civilized world has awakened at last to a realization of the enormous evil of permitting the unlimited and indiscriminate production of idiots, imbeciles, lunatics and criminals to become an insupportable burden upon the taxpayers. The cost to the state of Texas in 1910 for the insane alone was, in round numbers, one million dollars, and every four years the state is compelled to provide additional buildings, equipment and officers to accommodate the ever-increasing horde of lunatics, hereditary alcoholics for the most part, and the number is increasing out of all proportion to population. Sterilization by the simple means proposed has become a pressing necessity, and already seven American states and one Canadian (Ontario)—realizing that such a measure is an extension of personal liberty and true humanity, as well as true economy—have enacted laws in accordance with the plan set forth in Dr. Parker's paper, to-wit: Indiana, California, Connecticut, Oregon, Iowa, New Jersey, and New York, while the states of Louisiana, Utah, Florida and North Dakota will, this winter, consider such measure, upon petition of the state associations of physicians. It is time Texas was falling into line and keeping up with the advance of civilization.—Editor Texas Medical Journal.]

NO MARRIAGE LICENSE WITHOUT A PHYSICIAN'S CERTIFICATE OF FREEDOM FROM VENEREAL AND MENTAL DISEASE.*

By William J. Robinson, M.D.,

New York City.

Editor of *The Critic and Guide*, and of *The American Journal of Urology*; Author of "Sexual Problems of Today" and of "Never-Told Tales;" President of the American Society of Medical Sociology.

(Continued from October)

A most painstaking examination of his urine and prostatic secretion showed that he was free from gonorrhea; nor were there any signs of syphilis; in fact he was in excellent health. A close palpation of the testicles, however, revealed the presence of two small nodules—often the only tell-tale signs of former gonorrhea—one on each epididymis. To a question whether he ever had had gonorrhea, he answered in the affirmative, while further questioning also brought back to his memory the fact that he had had a bilateral epididymis. It then became clear why Mrs. X never became pregnant. To her anxious question, whether she could have a child, I was obliged to answer that it was not likely; that at any rate it would require long, long treatment—massaging the nodules with resorbent ointment, internal treatment, and so forth. And here she broke out in sobs and her tears came down in torrents. She tried to restrain herself, but could not. It was a pitiful picture. One could see that she felt that she was cheated—cheated of her hopes, and ambition, and expectations.

Case 8. This case is very similar to the preceding one, so far as the wife is concerned. For ten years she was praying for a child, but her prayers were not answered. She was examined a number of times and found all right. The husband did not consider it necessary to have himself examined, but at last she prevailed upon him. He denied ever having had venereal disease, and on examination I found that he was telling the truth. But I also found that he had but one testicle (was a monorchid) and that his "semen" was entirely free from spermatozoa. And here I was obliged to tell them that there was not any hope of their ever having children, that treatment would be useless and a waste of money. The woman did not break out in tears and sobs, but her face was a study worthy of the brush of a great painter.

Case 9. Aged thirty-four. Married seven

years. Sallow, dingy complexion, anemic, poor appetite. Husband complains that she has been getting very cranky and irritable of late; almost impossible to get along with her. As a girl and in the first years of married life she was of a kind and amiable disposition and very submissive. A diplomatic questioning and examination of each spouse apart elicited the sad fact that the husband is almost completely impotent. He was suffering from frequent night emissions before marriage, and it was as a cure for this condition that a quack doctor advised him to get married. And he did follow this stupid, criminal advice and got married without undergoing any treatment. And his condition has been getting worse and worse, since marriage, so that now both libido and potentia are almost completely absent. During her entire married life the wife has not had sexual satisfaction once. The first two or three years she did not mind it, as she had practically no desire. But with the awakening of her sexual instinct she has been suffering quite pronouncedly, and lately, she told me, she has begun to feel as if she could not stand it any longer.

Case 10. Age twenty-nine. Married five years. This case is similar to the preceding one. The wife came to find out whether there was any reason why she could not have any children. An examination disclosed the astounding fact that she was still a virgin with intact hymen. Further examination disclosed the reason why: the husband was completely impotent; while libido was present, and the semen proved normal, potentia coeundi was entirely absent.

Case 11. The woman had some misgivings on accepting the man, as she feared that her money and her position might be some factors in his ardent wooing. But he was so nice, so strong, and so gentlemanly that she finally married him. Even before the honeymoon was over she began to perceive that he was not a paragon of virtue.

The chief trouble was with his love for drink. He restrained himself at first but later on he gave unrestrained license to his appetite, and then he would break out in uncontrollable fits of passion. In short, she very soon saw that she had to deal with a confirmed dipsomaniac. And now her only anxiety is not to have any children from a drunkard father. But she did become pregnant, and she is bearing the child in anguish, in fear that it will be born abnormal or that it will grow up a drunkard. She was determined to get rid of the fruit of her womb; whether she changed her mind or whether she succeeded in her determination, I don't know. But her life is ruined.

Case 12. When the woman married she had no idea that there was anything wrong with her husband. Several months after marriage she discovered that he was suffering from mild epileptic attacks. He has had those attacks since childhood, but he did not consider it necessary to disclose the fact to her. She has had three children with him. One, a girl, seems to be quite normal; of the other two, who are boys, one is subject to epileptic fits, the other is a high-grade imbecile. He shows signs of moral depravity, is cruel to whomever or whatever he can be (to animals particularly), and when he grows up he will probably commit one or more crimes before he is made innocuous. The feelings of that mother in general, and her feelings for her husband, can be better imagined than described. And still she is unable to free herself from his importunities, she cannot leave him, for various reasons, and but for the fact that she at last learned the use of the proper means of preventing conception she would be bringing into the world more epileptics, more imbeciles to swell the vast overflowing ocean of misery, wretchedness and crime in which already we are wading knee-deep.

Case 13. Mrs. N. N. No more pitiable tale could be told. A thousand times better had she never been born or had she died in infancy or had she committed suicide. For she is now a paralytic imbecile, confined in a state institution for the insane, a torment to herself and all those about her, her relatives praying for her death as a deliverance from her suffering. And she was a nice, bright, lively woman. But the husband infected her with syphilis; she received no treatment until the symptoms became so prominent that they could not be overlooked. The

disease was in a virulent form, and now she is the victim of general paralysis of the insane, and it may be two or three years before death, the deliverer, will come to her and end her sufferings. The husband has escaped any brain involvement so far; probably because he took energetic treatment. He may still become a victim to this, the most terrible, sequel of syphilis. And I do not know whether it would not be poetic justice if he did. Not because he infected his wife, but because, on account of his miserable cowardice and selfishness, he did not see to it that she got proper treatment, although he knew full well the gravity of the disease.

Case 14. This is a case I saw but this afternoon. The couple were married just eight days ago, and last night she has already shown signs of an acute gonorrhea. Luckily they have taken the matter in hand at once; the husband did not try to conceal from the wife the true cause of her trouble, and he is willing to spend his last cent to get her well as quickly as possible.

This case is important as showing the damage and dastardliness of the quacks, and the share in this dastardly work of our radical newspapers. For the man in this case was treated by one of the advertising quacks for two years, and that quack assured him that he was all right, that he was perfectly cured, that there was not any danger in his getting married. And the reason the man went to the quack was, because he saw his advertisement in his Socialist daily newspaper, and he was unsophisticated enough to believe that a Socialist newspaper would not print any false and fraudulent advertisements. And so this poor woman has the Socialist newspaper to thank for her disease.

All this misery, multiplied by a hundred thousand, could be eliminated in a very simple manner: by demanding from each male applicant for a marriage license a physician's certificate of freedom from venereal or mental disease. I know that there would be a great deal of opposition to the enactment of such a law, but with public opinion thoroughly awakened and in favor of it, few legislators would dare publicly to oppose it.

I know the objections that are likely to be raised. One is, that the candidates would go to unscrupulous quacks, who for a few dollars would give them the desired certificate even when they were in the infectious

stage. But this can easily be obviated by demanding that the certificate be signed by some reputable physician. No advertising quack is considered a reputable physician, and no reputable physician would risk his reputation by giving a false certificate.

Another objection is, that the candidates could go to another state and get married. If all the states had such laws, then, of course, the candidates would have nowhere to go; but even before all the states pass such laws this can easily be obviated by declaring marriage between citizens of a certain state, who, in order to escape the requirements of their state law went into another state to get married, null and void. This is actually done in Indiana. Residents of the State of Indiana who go into another commonwealth to get married, and return to Indiana, are subject to penalties, and have their marriage declared null and void.

The mere presence of such a law on the statute books would have a wonderful effect. The young men, knowing that before they could hope to get married they must present a clean bill of health, would be exceedingly careful in their sexual relations, would use much greater precautions to avoid venereal infection; or, having had the mishap to become infected, they would at once seek the most competent and most energetic treatment. But even without passing such a law, if merely the idea became common, many young men would consider it their duty and their pleasure to have themselves examined before entering matrimony and bring a certificate of freedom from any transmissible disease to their prospective brides. It is being done now among certain people, but the number is still too small to have any appreciable effect on the post-marital incidence of venereal disease.

I might further say, that the custom now prevailing in the better families of having the prospective bridegroom take out a life insurance policy for a considerable amount of money is done not only for the purpose of protecting the young wife in case of the husband's premature death, but also for the purpose of ascertaining his physical condition. The bridegroom's prospective parents-in-law do not say brutally that that is the purpose, but the bridegroom understands it. Unfortunately the life insurance examination cannot generally determine the presence or absence of gonorrhea or syphilis, except when those diseases are present in

too evident a condition—for the life insurance examiner does not express the prostate gland to examine the prostatic secretion, nor does he perform the Wassermann reaction to ascertain the presence or absence of syphilis.

I stated that a certificate of freedom from venereal disease should be demanded from every male applicant. Some might ask, Why not also from every female applicant? and those who are for equality of the sexes cannot see why the women should be given privileges which the men do not possess. Theoretically there is no reason why it should not be so, but we live in a practical world and every reform advocated must have a sane, rational foundation—and the reason why I say that it is not necessary to demand a certificate of freedom from venereal disease from every female applicant is because the proportion of infected men to infected women (speaking, of course, of the respectable classes), is as one hundred to one. The difference may even be greater, and it seems to me absurd to subject a thousand women to vaginal examinations in order to find, perhaps, one who is infected.

Of course, should our women become as emancipated as the men, and should they adopt the same sexual standard as the men, and should venereal disease among our unmarried women become as common as it now is among the men, then they should be required to furnish a certificate just as well as the men. But what I said applies only to the certificate of freedom from venereal disease. As concerns mental diseases, such as insanity, epilepsy, and the like, the requirement should now apply to women no less than men.

One section I would incorporate in this law (such a provision exists in Norway, and there is no reason why it should not exist here), namely, that knowingly infecting a person with venereal disease should be considered and punished as a felony. It should not be necessary to prove malice; the mere fact that the person knew that he or she had the disease and concealed the fact from the partner should be sufficient for a conviction and, of course, for rendering any marriage contracted under these circumstances null and void.

It might be objected that many mental diseases, or mental taints rather, can not be detected by an examination, and therefore many people in whose families there is

feeble-mindedness, insanity, and epilepsy would still be married. This possibility, however, would be obviated by the requirement that all candidates for marriage would have to make a sworn statement that there has been no mental disease in their respective immediate ancestry. Naturally, swearing falsely would subject the parties to the usual penalties of perjury.

How about people who, knowing the exact condition of their partners, decide to disregard all risks and wish to marry nevertheless? Would I or would I not permit them to marry? This brings up an entirely different question. Provided there is full knowledge on both sides of the true state of affairs, I should permit them to marry—but with one condition: that under no circumstances must they bring forth children. So long as there are no children, the state has no right to interfere with the private affairs of two individuals. This brings us to the subject of teaching the people the

means of the prevention of conception, but this is another story—quite another story, a story for another evening.

The menu at the banquet at the Utah Medical Association, held last month, consisted of the following, and was printed like a prescription:

Consumme in cuppe Oz. VI
 Corporea Olivarie no. vi.
 Cardii celerie.
 Piscium Montium sine viscerae.
 Potatii in disguisare no ii
 Fowlæ cum tostae
 Potatti in skinae
 Peaum verdium.
 Cremae lactis a Greenlandae cum cakibus.
 Caffelinae cum extra cowell ad lib.
 Misce—Sig. Masticate thoroughly.

Certainly a clever example of porcine—"Latter Day" latin.

MISCELLANY

Chauffeur's Complete Outfit Sacrificed.—Consisting elegant mink fur lined coat, Persian lamb collar, \$35, pair of elegant bear robes \$15 each, Raccoon Cap \$5, pair of fur gloves \$4, pair of goggles 50c, 1 pair leather leggins \$3.50. Will sell separately or the lot, all new, never worn, original price \$225.

G. CHASE,
118 East 28th St., New York.

Extending to Other Countries.—It is claimed that more "Storm Binders" are being sent out to every state in the Union, also to Canada, and even Mexico, than of any other make. This does not excite the least surprise on our part, for from an extended experience with them we have come to regard them as well nigh perfect. We have yet to see a patient to whom we have applied one that has not expressed the utmost satisfaction, even gratitude.—(Editor of Mass. Medical Journal, Aug., 1912.)

The Influence of the Chemist on Modern Therapeutics.—One of the advances of modern chemistry has been to show that cod liver oil possesses much more virtue than merely as a convenient means of administering fat to the patient. With a clearer understanding of its chemical construction has come a more just appreciation of the large therapeutic value of its essential qualities. Before modern chemistry had succeeded in isolating the active principles of cod liver oil, the patient whose stomach was unequal to the difficult task (a difficult task even to the normal organ) of digesting a greasy mass; was of necessity denied the advantages of this valuable agent. Unfortunately this was too often the case, because the very patient who needed cod liver oil was possessed of a defective gastric organ. It was not until the pharmaceutical chemist made a practical use of his more theoretical colleague's investigations that a preparation of cod liver oil was secured which was freer from fat and which was capable of being digested by the impaired stomach. The most popular of such cod liver oil preparations is easily Cord. Ext. Ol. Morrhuæ Comp. (Hagee) which contains in palatable form the active principles of the oil, and by means of which the patient may enjoy the therapeutic advantages of the whole oil, and yet be spared the distress inevitable

upon taking the whole oil. Cord. Ext. Ol. Morrhuæ Comp. (Hagee) has for many years been put to the severest tests, and no stronger argument in favor of its clinical value may be advanced than that those who have used it longest use it the most.—Therapeutic Review.

Abdominal Support Without Discomfort.—To many a patient, particularly if nervous and irritable, an abdominal bandage or binder that provides adequate support is a source of extreme discomfort. This refers to the usual binder. But through the use of the Storm Supporter all this annoyance is avoided, since it is so accurately adapted to the anatomy and shape of the mid-region of the body, that maximum support is afforded with minimum pressure and constriction. Indeed the unique feature of the Storm binder is the frequency with which squeamish and fretful patients refer to the comfort it affords them. "I would never know I was wearing a band, but for the relief I obtain," says one. "The Binder fits and feels so good, it seems like part of my wearing apparel," says another. The advantage of all this in caring for obstetric and post-operative cases must be apparent. It goes far to account moreover for the remarkable success the Storm Binder has won among surgeons and obstetricians all over the country.—American Medicine.

The Action of Iodin.—No preparation has done more to refute the statements of the drug nihilist than Iodin. Recognition of its great therapeutic value long ago led to painstaking efforts to produce it in a free and active state, which ultimately proved successful.

Burnham's Soluble Iodine is now known far and wide and is prescribed with untold benefit in those cases, where the therapy of Iodin is indicated. It is far better than the unsatisfactory iodides, more prompt and decisive in action and nonirritating to the weakest stomach.

Discrimination in the Selection of Bromides.—A prominent physician recently said: "It is a mystery to me why bromide of potassium is so generally used by the profession. Its action is not near as reliable as the bromide of sodium, and better still is a combination of the bromides. For such

a preparation I use Peacock's Bromides, as I know it is made of the purest salts, and the difference between its therapeutic action and that of the commercial salts is very great. I have used it for years and it is always reliable and staple. It is impossible to obtain satisfactory results in prescribing bromide of potassium, and thus I have depended on this preparation. I have also learned that it is necessary to see that my prescriptions for it be filled at a first class pharmacy."

The purity, uniformity and palatability of Peacock's Bromides, to say nothing of its exceptional quality, readily account for its broad acceptance as the standard bromide preparation.

The "Old Reliable" Still Forging Ahead.—Vice-President Brown, of the Denver & Rio Grande, recently awarded to the Baldwin Locomotive Works, of Philadelphia, contract for six Pacific type passenger locomotives at a cost of \$25,000 each, to be delivered early in January, 1913.

These locomotives are much larger than any before used in passenger service on the Rio Grande, will haul trains about 50 per cent heavier and make much faster time. Some interesting data in connection with the new engines follow:

Cylinders, 26x26 inches.

Drivers, 67 inches in diameter.

Working pressure, 185 pounds.

Boilers, 76 inches in diameter, extended wagon-top type.

Equipped with Schmidt high-degree super heater.

Weight on drivers, 162,000 pounds.

Total weight of engine, 262,000 pounds.

Weight of tender, 175,800 pounds.

Water capacity of tender, 9,000 gallons.

Fuel capacity, 14 tons.

Tractive power, 42,000 pounds.

These latest-type engines will be used in the growing passenger service between Denver and Pueblo and supplement the order for thirty freight locomotives recently given by that company.

Rheumatism.—"Of the many diseases characterized by serious complications and consequences, acute articular rheumatism is one of the most important. Its frequency in children, its prolonged and painful course and its tendency to produce permanent cardiac lesions invest it with gravity, so far as the future of the patient is concerned,

which its low mortality during the attack does not materially mitigate. Carr says it should be considered next in importance to tuberculosis among the diseases of early life."

"Those under middle age are most frequently affected and epidemics occur quite constantly during the fall and spring months. The influence of season can be explained, in a great measure, by the effect of heat and cold upon cutaneous elimination. Those who in the past considered uric acid as the causative agent of this ailment were influenced a great deal by this and did not know that those retained toxic products lowered the protective agents of the body and thereby lessened its resistance to infection. It is a well established therapeutic dictum that in toxic or infectious processes eliminative measures should be employed to increase resisting power. Phagocytosis and immunity bear a direct ratio and when lowered invite disease."

No eliminative will give more prompt and satisfactory results than Tongaline, which has been used so successfully for nearly 30 years in the treatment of rheumatism, neuralgia, grippe, gout, nervous headache, malaria, sciatica, lumbago, tonsillitis, heavy colds and excess of uric acid.

Treatment of Dysmenorrhea.—The most satisfactory agent for use in the treatment of the pain occurring before and during menstruation in ovarian dysmenorrhea is pasadyne (Daniel's Concentrated Tincture of Passiflora Incarnata) in dessertspoonful doses every three hours. If a card is addressed to the Laboratory of John B. Daniel, Atlanta, Ga., a sample sufficient for trial will be sent to any reputable physician.

Abortive Treatment of Colds.—Cystogen-Aperient, 2 to 3 teaspoonsful to a large glass of water, repeated every four hours, will usually abort a cold if taken as soon as the first symptoms (sneezing, "stuffiness," etc.) are observed. After free laxative action has been obtained, Cystogen-lithia or Cystogen in powder or tablets can be substituted for the aperient form. Cystogen, in full doses, enters all of the fluids of the body, and its use in the treatment of acute and chronic rhinitis, otitis media, bronchitis, etc., is as logical as the established practice of prescribing it where genito-urinary antisepsis is indicated.

You can relieve almost any kind of pain with Menthol properly combined with Salicylate of Methyl and a pure penetrating base. That's exactly what you get in

BAUME ANALGÉSIQUE BENGUÉ



Comes in a handy little tube. Convenient for your medicine case.

THOS. LEEMING & CO.,
American Agents,
99 Chambers Street, N. Y.

Some Valuable Products for the Treatment of Diseases of Bacterial Origin.—Since the advent of diphtheria antitoxin it is doubtful if any new remedial agent has elicited greater interest than is now being manifested in the bacterial derivatives known as Phylacogens. These products were originated by Dr. A. F. Schafer, of California, the method of preparation and technique of application being first presented to the San Joaquin Medical Society in Fresno. To the uninitiated it may be said that the term Phylacogen (pronounced phyl-LAC-o-gen) means "phylaxin producer," being derived from two Greek words signifying "a guard" and "to produce." The Phylacogens are sterile aqueous solutions of metabolic substances generated by bacteria grown in artificial media. They are produced from a large variety of pathogenic bacteria, such as the several staphylococci, streptococcus pyogenes, bacillus pyocyaneus, diplococcus pneumoniae, bacillus typhosus, bacillus coli communis, streptococcus rheumaticus, streptococcus erysipellatis, etc.

Four Phylacogens are now offered to the

medical profession: Mixed Infection Phylacogen (used in the treatment of bacterial diseases of unknown etiology), Rheumatism Phylacogen, Erysipelas Phylacogen, and Gonorrhea Phylacogen. They have been thoroughly tested clinically and are said to be producing excellent results in the treatment of the various pathological conditions in which they are indicated. They are administered hypodermically—subcutaneously or intravenously—preferably by the former method, the latter being advised only in cases in which a quick result is demanded. They are supplied in hermetically sealed glass vials of 10 Cc. capacity.

The Phylacogens are prepared and marketed by Parke, Davis & Co., who have recently issued a 25-page pamphlet which describes them in detail—the process of manufacture, therapeutic indications, dosage, methods of administration—everything, in fact, that needs to be known by the man who desires to use phylacogens. Every physician in general practice, every practitioner who desires to keep abreast of the latest advances in bacterial therapy, should have

a copy of this valuable booklet. Write to Parke, Davis & Co., at their general offices in Detroit, Mich, ask for the "Phylacogen pamphlet," and mention this journal.

"The Physician's O. K."—"No more old castor oil for me. Laxol is O. K. and it does the business. A. R. Carmen, M. D., 27 West 127th Street, New York City." The significance of this positive expression of opinion from a well-known member of the profession, will be apparent to every physician who has noted the look of disgust upon his patient's face, when he has suggested "a dose of castor oil." Laxol is prescribed, specified and insisted upon by doctors all over the civilized earth, because of its purity, palatability and efficacy. A remedy worth knowing.

If the Tape-Worm Could Talk.—If the tape-worm could only talk he would refer sarcastically to many preparations of male-fern now dispensed. Designed for his eviction, countless doses have been impotent against him; and despite them all, he continued to remain, as ever, on the premises—very much alive.

But Taenicide (Abbott) spells his finish. It's the one male-fern preparation which he fears and cannot hold out against.

Here's the formula:

Oleoresin male-fern	drs. 2
Chloroform	mins. 90
Croton oil	mins. 4
Castor oil, to make.....	ozs. 2

Taenicide (Abbott) brings the parasite at the very first trial, nearly always, head and all. Nothing else does the work so effectually.

The doctor-in-charge of a certain state penitentiary said recently:

"We have used it here for many years and always with success. I can't recall that it has ever failed us. We tried, once, to make up some stuff, copying your formula and using materials bought at the drugstore, but we failed dismally. The imitation article did not work as we expected."

The makers take great pains to select, for this formula, a first-class quality of male-fern, which is one of the reasons it does the work so well.

The doctor who needs (and every doctor does quite frequently) will find this preparation to do exactly what it is intended to do. Send for a circular.

Dr. C. C. Haskell of the department of experimental medicine of the Lilly laboratories, Indianapolis, recently returned to his office after a summer's work on Staten Island, New York. Dr. Haskell has been connected with the Seaside Hospital of St. John's Guild for several years studying infants' diseases, especially dietary troubles. During the past summer he was house physician and had special opportunity to study the question of infant foods and methods of feeding, as a majority of the patients were infants suffering from gastro-intestinal disturbances.

Growth in the Use of Bacteria.—Treatment of infectious diseases with preparations derived from corresponding micro-organisms is unquestionably growing in favor. Not only do the bacterial vaccines (or bacterins) seem destined to a permanent place in therapeutics, but their field of applicability is constantly broadening. Proof of this is seen in the growing list of these products announced by Parke, Davis & Co., no less than fifteen of the bacterins now being offered to the profession.

There are a number of reasons for the favor which is being accorded to the bacterial vaccines. In the first place these products are in consonance with the scientific trend of present-day medication. They are being used with a gratifying measure of success. The method in which they are marketed (sterile solutions in hermetically sealed bulbs and in graduated syringes ready for injection) appeals to the modern medical man, assuring, as it does, both safety and convenience. The moderate prices at which they may now be purchased will tend to give them still greater vogue. And these prices are worthy of note, since they represent a great reduction from those formerly prevailing, amounting, if we are not mistaken, to as much as 60 per cent. in many cases. They are announced elsewhere in this journal over the signature of Parke, Davis & Co. and will repay a careful scrutiny.

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ABORTIVE TREATMENT OF ACUTE MASTOIDITIS, WITH REPORT OF CASES*

WILLIAM C. BANE, M.D.,

Professor Oto-Laryngology, Medical Department University of Colorado; Oto-Laryngologist St. Joseph's, Denver City and County Hospitals; Eye and Ear Surgeon Rock Island Lines, Denver, Colorado.

It is the consensus of opinion of otologists that not less than fifty per cent of the cases of acute mastoiditis get well without operation. The writer is of the impression that a much larger percentage might get well without operation if abortive treatment was instituted early enough; hence his reason for presenting the subject for consideration. In acute otitis media the mastoid antrum cells are nearly always more or less involved. The symptoms of involvement of the mastoid, as pain in and about the mastoid process, and tenderness upon pressure over the antrum, tip and entrance of the mastoid vein, vary greatly. The variation in the severity of the symptoms depends upon several factors; namely, the exciting cause of the otitis, the character of the microorganisms, and the resistance of the tissues to disease. The most severe and rapidly developing cases are those in which streptococci and la grippe bacilli are present in the discharge. However, a patient with greatly lowered resistance will manifest severe symptoms under staphylococcus and pneumococcus infection.

Some patients from the beginning of the inflammation show early involvement of the mastoid with acute otitis media, the pain being quite as severe back of the ear as in it. Others do not give evidence of the mastoiditis until from five to ten days after the onset of the otitis media, or the period when drainage is inadequate, the pus becom-

ing pent up in the middle ear and adjacent cells. The perforation may at this stage be almost closed, and also the aditus ad antrum be too small to permit of free drainage from the mastoid.

The position of the head in otitis media, according to the experience of Dr. Charles A. Adair-Dighton, has been a contributory cause of left-sided mastoiditis, sinus thrombosis and meningitis. Ninety per cent of his cases being left sided, his conviction is that lying on the right side, to favor heart action, gravity favored pus retention and infection of the left mastoid and adjacent structures.

The treatment adopted in the early stages of acute mastoiditis should always be along the line of an abortive effort. A very large percentage of the cases of acute otitis media and mastoiditis originate from extension of the inflammation from the naso-pharyngeal mucous membrane and glands. As a prophylactic and abortive measure, it is advisable to frequently cleanse the nasal and pharyngeal mucous membrane of germ-laden exudate. Being as a rule a complication of otitis media with an exudate in the middle ear, the first object is that of free drainage of the middle ear through the drum head: The enlargement of the existing perforation or a free incision of the drum head where bulging, and if indicated through the posterior portion of the flaccid membrane. The incision should be from below upward and moderately close to

*Read before the Denver City and County Medical Society, April 16, 1912.

the posterior margin of the membrane, supplemented, when indicated, by a short right-angled incision, to prevent early closure of the opening. If in the coagulative stage, previous to pus formation, which, as a rule is within 48 hours from the onset of the inflammation, very free serous discharge may be anticipated.

Drainage is encouraged by the use of pencils of cotton or gauze, the pencils of cotton changed as often as they get moist. The existence of pain in the mastoid and tenderness over the antrum, call for local depletion. If the above symptoms are but moderately severe, I make it a rule to apply cantharidal collodion over the mastoid, giving instruction as to dressing the blister. I am aware that this measure is mentioned by some aurists only to be condemned, they claiming that it interferes, owing to the superficial soreness, with determining the deep tenderness. This is a mistake, for upon requesting your patient to ignore the superficial soreness and answer as to pain produced by firm pressure, you will invariably get an intelligent answer. I have made the test a great many times and have yet to be deceived. The rule is that within 24 to 48 hours the deep tenderness has in a great part disappeared. The local depletion from an adequate blister is marked. In the fulminating cases I resort at once to the application of three or four Swedish leeches, and there follows marked relief of the pain and tenderness. The artificial leech is excellent for local depletion. Dr. Bird of Tampa, Fla., has reported nine cases of typical acute mastoid infection that were given prompt and permanent relief by the artificial leech, no further active treatment being necessary.

There was a time when I followed the practice of applying ice poultices for 24 to 36 hours in the early stage of mastoiditis, but of late years I have discontinued it. While it has a benumbing effect, it does not equal in beneficial effect that of the hot applications, and

is more apt to mask the disintegration that is going on in the deeper tissues.

The aiding of nature by drawing out the exudate with the use of the suction speculum, once or twice daily, is valuable in aborting the mastoiditis. Certainly the aditus ad antrum is inadequate for drainage in some cases, if we are to judge from the narrowness of the passage as occasionally observed during a mastoid operation.

Irrigation as ordinarily carried out is of but little value. In the serous stage it is not needed, the cotton drains serving a better purpose. However, irrigation with the bell-shaped suction irrigator of Fowler is of decided advantage; it not only cleanses the canal, but draws exudate from the middle ear. Early microscopic examination of the exudate should be made and the patient given the benefit of a vaccine, either autogenous or stock vaccine. While as yet we lack enough data to be enthusiastic over the action of the vaccines, where possible the patient should have the benefit of the doubt. Certainly if the micro-organisms are streptococci, it is highly important to destroy their toxic action. A very important part of the treatment is rest in bed, to keep the circulation quiet and conserve the patient's strength. Evacuation of the contents of the bowels and stimulation of the portal system is usually indicated. We have no better eliminative than small, frequently repeated doses of mild chloride of mercury. Anodynes are needed in some cases. Opium should not be administered as a rule. The salicylates are beneficial, especially aspirin. It modifies the pain, quiets the circulation and stimulates perspiration. We know from experience that it is impossible to abort all cases of acute mastoiditis, even when seen early. A few selected cases illustrative of the beneficial effects of aborting treatment may be of interest.

Dr. M., aged 50, of Greeley, Colo., while convalescing from typhoid fever and cholecystitis, developed inflam-

mation of the right ear. The drum head was congested and bulging, pain radiated from the ear to the mastoid and side of the head. There was marked tenderness of the mastoid to pressure. Free incision of the drum head was followed by profuse flow of bloody serum. The temperature was elevated to 103.2-5° F. Cantharidal collodion was applied to the mastoid, producing a large blister. The temperature dropped to near normal within 12 hours after blister raised, and there was then manifest decided diminution of the tenderness in the mastoid. The suction speculum was used twice daily to drain the middle ear. The subsidence of the inflammation was quite rapid.

Mrs. N., aged 58, developed a left-sided otitis media ten days before coming under my care. The drum-head had been incised by an aurist four days after the onset of the otitis. The pain had not ceased entirely, though diminished with drainage. Tenderness had existed in the mastoid and the temperature was elevated to 102° F. Examination revealed a polypoid mass, preventing a view of the drum head. The mass was snared off. The mastoid being tender, cantharidal collodion was applied over it. Two days later an additional mass of polypoid tissue had appeared in the perforation; this was snared off and chromic acid applied. Nine days from the removal of the first mass of polypoid tissue, the ear was dry and no evidence of granulations to be seen. In this case the drainage from the mastoid was impeded by the polypoid tissue.

F. C., aged 19, while convalescing from typhoid fever and acute cholelithiasis and operation with drainage, developed acute inflammation of the right ear. There was decided tenderness of the mastoid upon pressure. Evening temperature was 100° F. The drum-head was freely incised and cantharidal collodion applied over the mastoid. Suction speculum used twice daily.

Cotton drains were used, and the ear irrigated once or twice daily. After five days the temperature was normal and all mastoid tenderness gone. On the 14th day the ear was dry.

E. H. R., aged 54 years, was referred by Dr. H. W. McLauthlin on account of right-sided otitis media and mastoiditis. For one week he had suffered excruciating pain, that radiated from the right ear throughout the right side of the head. Discharge appeared in the right ear on the third day of the inflammation, without relief of pain. He had chills frequently. There was a red, edematous condition of the auricle and adjacent tissue. The mastoid was very tender to pressure. There was darkness of the mastoid to transillumination. The drum head was freely incised, and irrigations with the Fowler irrigator ordered. Cantharidal collodion was applied over the mastoid. The second day there was a decided increase of the edematous condition, color reddish, suggestive of erysipelas. P. 80, T. 101.5° F. Respiration, 24. Discharge from the ear was very free. An examination of the discharge was made by Dr. Matthews, who reported short-chained streptococci. Vaccine was made. Ichthyol and glycerine were applied locally. The third morning the pulse was 96, temperature 104 F., and respirations 35. Face of a purple hue, and there was some extension of the edema. Patient was given 15 drops of tincture of chloride iron and 10 grains of aspirin every three hours. At 6 p. m. pulse was 84, temperature 102.5° respiration 36, and the patient was perspiring freely. The autogenous vaccine was given. The sixth day of treatment the pulse was 76, respirations 16, and temperature 97.3-5°. Tongue was clean, the mastoid free from tenderness, and the swelling was nearly all gone from the scalp and ear. There was moderate discharge from the ear. A second dose of vaccine was given. Convalescence from that time on was rapid. 330 Metropolitan Bldg.

HERNIAS OF THE UTERINE APPENDAGES

AIME PAUL HEINECK, M.D.,

Surgeon to the Cook County Hospital, Chicago, Ill.

In the female, the frequency of hernias, and especially of hernias of the internal genitalia, has been and is still underestimated. Owing to the lack of study heretofore given to this clinical entity, hernias of the uterine adnexae are often overlooked, not uncommonly misdiagnosed, and therefore subjected to injudicious treatment: harmful alike to the individual and to the hernial contents, prejudicial alike to the patient's general well-being and to her reproductive powers. Impressed by the clinical importance of the condition and surprised at the insufficient consideration given to the subject in even the most modern gynecological and surgical text books, I have collected the following data which may prove of service to some of my professional colleagues as well as to future investigators of the subject. Knowledge of the occurrence and familiarity with the symptomatology of a clinical condition lead to its more frequent and more timely recognition.

Soon after beginning the consideration of the subject, we became convinced that deductions and conclusions to be available, should be based solely upon the study of cases whose accuracy of diagnosis is self-evident. Therefore in the preparation of this paper we have only considered cases in which the hernial contents were demonstrated at the dissecting, autopsy or operating table.

We have conformed to the nomenclature in actual use; however, to better insure precision of classification and a more intelligent discussion of the subject, we define, at times, perhaps needlessly, the terms employed. The word hernia signifies the permanent or temporary protrusion of one or more viscera from their normal situation through a normal or abnormal opening

in the walls of the cavity within which they are contained. It implies the existence of a hernial ring, of a hernial sac, of hernial sac contents and of sac coverings. In the hernias discussed in this article, the protruding organ was always either an ovary, an oviduct, or Fallopian tube and an ovary. In some cases, as associated hernial contents we find omentum, a segment of the alimentary canal, a part of the urinary bladder, a rudimentary uterine horn, or the entire uterus, be the latter organ rudimentary, infantile, or of normal development. The tube or ovary or both in part or in their entirety may be herniated. All the hernias herein considered are external hernias; that is, their outermost overlying saccular covering is skin, and each, after reaching a certain stage of development gives rise to a more or less visible, more or less palpable external swelling in the inguinal, femoral, ventral, obturator or ischiatic regions, depending upon the anatomical location of the hernia. Internal hernias, that is hernias in which one or more loops of intestine find their way into pouches or recesses in the posterior peritoneal wall, and diaphragmatic hernias, be the latter true or false, congenital or acquired, constitute other chapters of surgery.

The escape of the uterine appendages from their normal situation may take place through any of the weak spots or openings of the lower abdominal or abdomino-pelvic cavities. A hernia originating either in the internal or in the external inguinal fossae and escaping above Poupart's ligament is an inguinal hernia; if escaping beneath the same ligament, it emerges through the crural canal and the saphenous opening, it is a femoral hernia; if through the obturator canal, an obturator her-

nia; if along the course of the gluteal or sciatic nerves and vessels, emerging almost always above, very infrequently below the pyriformis muscle, very rarely through the lesser sacro-sciatic foramen, a gluteal hernia; if through an operative scar in the abdominal wall, a post-operative hernia.

Though sanctioned by long usage, the classifying of hernias into congenital and acquired is, at times, misleading. It is misleading because it is practically impossible to determine the congenital or acquired nature of many hernias. Furthermore, the term congenital hernia, as now used, does not imply in the female that the hernia was present at birth, as it is also applied to hernias whose post-natal development is due to predisposing conditions of congenital origin: developmental defects, persistence of transitory embryonal or fetal states which, owing to their non-disappearance with growth, permit the occurrence of outward visceral displacements. Some hernias are congenital in the truest sense of the word; they are complete at birth, hernial contents being then present. In most of the so-called congenital hernias, the sac only is existent at birth; in an acquired hernia, the sac is always of post-natal development, and in all but hernias *par glissement* is entirely derived from the parietal peritoneum. Congenital hernial sacs result from the want of closure of peritoneal processes, such as the *processus vaginalis peritonei* in the male, the canal of Nuck in the female, etc., normally present in the fetus. Congenital hernias may appear at any period of life.

Orifices for the transmission of vessels and ducts are normally present in the muscular and aponeurotic layers of the abdominal walls. An acquired hernia is formed by the gradual or sudden escape through these orifices, pathologically widened, of viscera normally contained within the abdominal cavity; the viscera in their passage through and

beyond the abdominal wall create paths of escape for themselves by bulging and pushing forward the parietal peritoneum.

In many cases, the congenital or acquired nature of the hernia is either too vaguely stated or is left unmentioned. Femoral hernia seldom occurs before adult life.

Tubal, ovarian and tubo-ovarian hernias occur in the colored, and in the white race. Commonly, the condition is unilateral; infrequently, it is bilateral. When bilateral, the hernias may or may not be developed to the same degree on both sides. The bilaterality may date from birth; may be acquired. In the latter case, the hernias may from the first have been bilateral, or an interval of time of shorter or greater length may have intervened between the appearance of the two hernias. In Broca's case, when patient was eight months old, the right inguinal hernia appeared, but the left inguinal hernia did not become manifest before the patient was four years of age. All the bilateral tubal, ovarian, or tubo-ovarian hernias recorded in the medical literature of the last twenty years are of the inguinal variety. This is in accord with a well-known fact that, in both sexes, double femoral hernias are less frequent than double inguinal hernias.

A tubal, an ovarian or a tubo-ovarian hernia may coexist with one or more hernias of other organs. Multiple hernias are not infrequent, the hernias present being either of the same or of different types, as two inguinal hernias or one inguinal and one femoral hernia on the same or on opposite sides of the body.

The hernias which we have under consideration may or may not be associated with non-development, malformation or absence of the other internal or of some external genitalia. In Martin's (Kossmann) case, a hernia of the left tube and ovary, the uterus was displaced upwards, forwards and to the

left by a cyst of the right ovary having the volume of a man's head.

In almost all the cases the operation performed was a herniotomy, and as herniotomy affords little opportunity for direct examination of the pelvic organs, the condition of the non-herniated genitalia was determined in only a few cases.

Hernia is a widespread disease. The relative incidence of hernias of the internal genitalia as to age corresponds to that of hernia in general. In our series, the youngest patient was four weeks old at time of operation. Nicoll operated successfully for ovarian hernia two infants each one and a half months old. The oldest patient operated on was seventy-eight years old. She had a left tubal obturator hernia. Lickley reports a right tubo-ovarian obturator hernia observed in a dissecting room subject who had died of general debility and hemiplegia at the age of eighty-seven years. In many cases, the age is not stated. The age given by most authors corresponds to the age of the patient at the time of operation and not to the age at which the hernia first appeared.

The study of the reported cases demonstrates:

(a) The frequency of hernias during the first year of life.

(b) The rarity of the condition from the first to the fifteenth year of life.

(c) The noticeable progressive increase in the number of hernias observed from the fifteenth year on, the maximal frequency being seen during the fourth decade of life.

(d) After the fortieth year, there is a decline of the number of hernias; they become relatively rare as the extremes of life are approached.

During the child-bearing period, hernias of either or of both uterine appendages have been observed in nulliparae, in primiparae and in multiparae.

Etiology.

The predisposing and exciting causes of tubal, ovarian and tubo-ovarian hernias are shown by the analysis of the collected cases to be the same as those of other hernias in the female. The persistence of the canal of Nuck is an etiological factor of the greatest significance in the causation of inguinal hernias. The canal of Nuck, the homologue of the processus vaginalis peritonei in the male, is a peritoneal diverticulum accompanying and adhering intimately to the round ligament, descending in some cases as far as the insertion of that ligament in the labium majus. This peritoneal process, whose dates of origin and disappearance are not accurately known, is usually found completely obliterated at birth; it may close after birth; it may even persist throughout life. When the canal of Nuck is only partially or completely unobliterated, it forms a potential hernial sac and is conceded to be the most important congenital predisposing cause to inguinal hernia formation. It is a matter of common knowledge that preformed sacs are not of infrequent occurrence in the inguinal region. They have been found in other hernial regions. A sudden or forcible increase in intra-abdominal pressure, such as can be determined by muscular effort, by a misstep in an attempt to save one's self from falling, can lead to hernia formation by causing the irruption in a preformed sac of a tube, an ovary or a tube and ovary. As during infancy, the internal genitalia can neither be displaced by their physiological activity which is nil, nor by the development of pelvic tumors (rare during early childhood), nor by muscular effort, it follows that hernias of the uterine appendages, at that period of life, are due to such congenital anatomical defects as facilitate tubal, ovarian or tubo-ovarian displacement.

Though, as an etiological factor in

the production of hernias, the existence of hereditary predisposition is denied by some authors, to us the influence of heredity appears positive. Hernia being a malformation often due to developmental arrest, such as non- or incomplete obliteration of the processus vaginalis peritonei, non-obliteration of umbilical ring, etc., it is subject to hereditary transmission. It is reasonable to assume that like structural characteristics beget a like predisposition and a like resistance to hernia development. Among other etiological factors should be mentioned:

1. All conditions associated with increased mobility of the uterine appendages:

(a) Lengthening of the broad ligaments consecutive to repeated pregnancies. Owing to its loose attachment to the broad ligament, the position of the ovary is easily affected by the physiological or pathological movements and displacements of the pelvic organs.

(b) Pathological relaxation of the ligaments due to puerperal sub-involution. As a cause of the various uterine displacements, pregnancy is an important factor.

(c) Abnormal length of the broad, ovarian and infundibulo-pelvic ligaments.

(d) Relaxation of the other tubal, ovarian and uterine ligaments.

2. All conditions that tend to increase the intra-abdominal pressure:

(a) By overcoming the resistance offered by one or another of the weak points of the abdominal wall. Sudden increase of the intra-abdominal pressure may lead to the irruption of a tube, ovary or tube and ovary in the sac of an old enterocele.

(b) Occupations necessitating repeated muscular efforts associated with increased intra-abdominal tension, as the lifting or pushing of heavy weights, etc.

(c) Physiological or pathological states which distend the abdominal cav-

ity, which stretch the abdominal parietes and widen the orifices normally present in the muscular and aponeurctic layers of the abdominal wall. Enteroptosis, obesity, abdominal tumors, ascites, pregnancy, etc., can be regarded as predisposing and exciting causes to hernia production.

3. All conditions which weaken the abdominal wall. A hernia can occur wherever the parietal peritoneum is not sufficiently supported by the transversalis fascia and the other structures of the abdominal wall.

(a) Acute or chronic diseases debilitating the organism, especially such as cause great emaciation.

(b) Obesity weakens the abdominal wall and increases the intra-abdominal pressure.

(c) Traumatism.

(d) Enterocoeles, epiploceles and entero-epiploceles.

(e) Feeble development or atrophy of the aponeurosis of the transversalis muscle and of the conjoined tendon.

(f) A shortening of the round ligament of the hernial side is not rare.

Hernial Sacs.

Congenital hernias have sacs of prenatal formation. That the canal of Nuck remains patent in many cases long after birth, even into adult life, has been proven by a number of investigators. Acquired hernial sacs are formed of parietal peritoneum forced by intra-abdominal pressure through some congenital or acquired defect in the abdominal walls.

In the female the following anatomical characteristics are strongly suggestive of the congenital sac: Great vascularity, absence of sub-serous fat, folds, valvular or diaphragmatic constrictions, cyst-formations, scar-like induration of the wall, etc. In congenital inguinal hernias, it is also noted that the round ligament is intimately adherent to the sac.

As we see, the sac results from the

bulging outward of the parietal peritoneum without solution of continuity. It consists of a neck, body and fundus. Of these three, the neck is the most important. It is through it that the general peritoneal cavity communicates with the hernial sac cavity. It may be the site of constriction. The fibrous envelope of the sac is due to the condensation of the fibrous layers which the hernia in developing pushes forward.

The internal surface of the sac, whether the latter be congenital or acquired, has all the peculiarities of serous membranes.

In the female, encysted inguinal hernias result from partial closure of the canal of Nuck, the peripheral portion of which is transformed into a cyst in which a developing hernia prolapses, or from the sinking of a hernia in pre-existing hernial hydrocele.

There is really no sacless hernia; but the herniated viscus may be an organ only partially covered with peritoneum.

In sliding hernias, the anterior and lateral portions of the sac are, as in ordinary hernias, derived from the parietal peritoneum, while the remaining portion is formed by the anterior surface of the herniated caecum, sigmoid, bladder or Fallopian tube.

Hernial sacs may be dome-shaped, cylindrical, digitiform, sacculated or irregular; may show constrictions with intervening dilated portions. Most femoral sacs are small and not infrequently are embedded in a mass of fat. The sac in recent hernias may be very thin. In children and in young infants sac is extremely thin.

Hernial Fluid.

The reporters not infrequently state that fluid of some nature or other was present in the hernial sac. The fluid may be serous, sanious, muco-purulent, purulent or fetid in character.

Hernial Sac-Contents.

Tubal Hernias.

The tube, either in part or in its entirety, may be the sole content of the hernial sac. As associated hernial contents, a portion of the urinary bladder, normal intestine, gangrenous intestine and omentum were noted.

The herniated tube may be normal and free; may be adherent to sac; may be strangulated; may show inflammatory lesions; may be cystic; may be the seat of a pyosalpinx.

Ovarian Hernias.

The ovary may be the only content of the hernial sac; or may be associated with a cystic parovarium, with omentum, with intestine or with a rudimentary uterus. The herniated ovary is reported as being in some cases normal, in others enlarged to twice its normal size, infiltrated with blood, the seat of a large hematoma, adherent to sac, cystic, to have presented areas of suppuration, to have shown gangrenous changes.

Tubo-Ovarian Hernias.

Hernias of the tube and ovary constitute the largest number of hernias of the uterine appendages. As associated hernial contents may be mentioned: Urinary bladder, Meckel's diverticulum, the appendix vermiformis, omentum, intestine and the uterus.

We know of only two cases in which gestation occurred in an inguinal hernial sac; both were tubal pregnancies.

The herniated organs may be normal, may show slight or marked pathological changes. The displacement of a tube or of an ovary into a hernial sac is unfavorable to its anatomical and functional integrity. In a hernial sac, these organs are exposed to repeated slight traumatisms and to circulatory disturbances. The herniated ovary frequently undergoes cystic changes; may show atrophy; may show enlargement; may be undersized.

The herniated tube may be the seat of suppurative salpingitis, of abscess, of tuberculosis; may be adherent to sac by an inflammatory band.

We must not forget to state that a tube and ovary present in a hernial sac do not always have the same reciprocal relation that they have in the abdominal cavity, and that the pathological changes which they show may antedate their displacement into a hernial sac.

Reducible Hernias.

In reducible hernias, and, at first, practically all hernias are reducible, the hernial contents either return spontaneously into the abdominal cavity when the patient assumes the recumbent posture or they can be manipulated back, with more or less difficulty, but without a cutting-operation, into the cavity from which they escaped. Even in reducible hernias, the sac early contracts adhesions to neighboring tissues and becomes irreducible. The terms reducibility, irreducibility, torsion and strangulation have reference only to the hernial contents and not to the sac.

Reposition, spontaneous or manual, may be temporary, may be permanent. Many reducible hernias reappear as soon as the standing posture is assumed; others, to reprotrude, require more or less muscular effort on the part of the patient.

Irreducible Hernias.

When the contents of a hernial sac cannot in their entirety be manipulated back into the abdominal cavity, the hernia is said to be irreducible, provided that there is not any or but a very slight interference with the blood supply of the herniated organ or organs, and that there is no disturbance of function. If irreducibility and both functional and circulatory disturbances are present, the hernia is designated as **strangulated**. Irreducibility, partial or complete, predisposes to complica-

tions of a serious nature: Inflammation, incarceration, strangulation and torsion.

The irreducibility of hernias is dependent upon one or more of the following factors:

(a) Difficulties incident to manipulating a small movable body such as the ovary through a small opening.

(b) Relative narrowness of the hernial canal: Femoral, inguinal, etc.

(c) Sudden increase in size of hernia resulting from some unusual muscular effort.

(d) Changes in the hernial contents: Increase in bulk from deposit of fat, from cyst formation in mesentery, in omentum, from inflammatory or neoplastic changes.

(e) Adhesions of inflammatory origin:

1. Between sac and contents:

2. Between the different contents.

(f) Large volume of hernia.

(g) Sliding hernia (Hernies par glissement).

The irreducibility of a hernia of the uterine appendages is due in some cases to the presence as associated hernial contents of the urinary bladder, of the caecum, or of the sigmoid. In other cases, the irreducibility is due to the fact that the layers of the broad ligament, as they leave the Fallopian tube, enter into the formation of the hernial sac.

Strangulated Hernias.

All strangulated hernias are irreducible. In addition to irreducibility, they present a constriction of the hernial contents of such a degree as to seriously interfere with the circulation of the blood in the herniated organ or organs. "If the pedicle of a tumor is tied off or if a finger is surrounded tightly by a string, the parts distal to the ligature do not become inflamed; stasis and gangrene result" (Alberts). The same primary changes occur in the contents of a strangulated hernia; the

inflammatory changes are secondary to the circulatory disturbances. There is interference first with the venous circulation; then with the arterial. As a result of this interference with the circulation, we have a serous exudate the amount of which depends upon the degree and duration of the strangulation and also upon the extent of the secreting surface. The sequence of events is as follows: Congestion, stasis, serous exudation, then inflammatory phenomena and gangrene. Strangulation of a herniated tube or ovary is not as dangerous a complication as strangulation of a herniated loop of intestine.

Strangulated inguinal hernias may be congenital or acquired. Strangulation can occur at any age, irrespective of type of hernia or of hernial contents.

As hernial contents can be mentioned the following organs: Fallopian tube, ovary, tube and ovary, tube and a portion of the urinary bladder, tube and a loop of small intestine, ovary and intestine, tube, ovary, intestine and omentum, uterus and adnexae of one side, loop of intestine, uterus and left adnexa.

The symptoms given by the strangulated inguinal hernias are those of inflamed hernias. Symptoms of intestinal obstruction may also be present.

Torsion of the Pedicle.

This complication, peculiar to ovarian and to tubo-ovarian hernias, is not of unusual occurrence. As far as we have been able to determine, torsion of the pedicle has been observed only in irreducible congenital hernias of the inguinal type.

The two youngest patients were four and eleven weeks old, respectively; the oldest, a poorly nourished child, was fourteen months old. All the other patients were less than one year old. The right and left side are involved with about the same frequency. The

occurrence of this accident is favored by the mobility of the ovary and the slenderness, at this period of life, of the pedicle of the herniated organ or organs.

The pedicle, usually composed of the Fallopian tube, broad ligament and contained vessels, may have made a half-turn upon itself; may be twisted twice, thrice or several times upon its axis. The pedicle may be twisted in any part of its course.

If unrelieved, torsion of the pedicle determines in the hernial contents anatomical changes similar to those caused by strangulation. The impeded return of blood in the veins leads to congestion and swelling of the organ or organs below the twist. There are noticed in the hernial contents, the following circulatory disturbances: Congestion, stasis, thrombosis, vascular rupture (ovary seat of large hematoma), and interstitial hemorrhages. The interstitial hemorrhages and the serous transudates lead to tissue disassociation.

In torsion of the pedicle, the amount, odor and color of the hernial fluids depend upon the tightness and duration of the twist and upon the extent of the gangrenous changes. The fluid present in the hernial sac may be serous, may be blood-stained, dark colored, reddish-brown.

Torsion of the pedicle gives rise to symptoms somewhat analogous to those of strangulated intestinal or omental hernias. In fact, the condition has frequently been diagnosed a strangulated intestinal hernia.

Post-Operative Ventral Hernia or Hernias in Abdominal Scars.

The protrusion of parietal peritoneum with stretching of the cicatrix over it, may occur after any operative or other penetrating wound of the abdominal wall, except those of very small dimensions.

Though these hernias may occur in any part of the abdominal wall, they are located almost always either in the median line or in the region of the appendix. Owing to the employment of improved operative technique, and to the more rigid observance of the requirements of surgical asepsis, post-operative hernias are decreasing in frequency.

There are two types: In one, there is a uniform distention of the cicatricial tissue producing a condition somewhat analogous to separation of the recti muscles; in the other, the hernia is due to the giving way of weaker portions of the scar.

The main predisposing etiological factors of post-operative hernias are:

1. Long incisions.
2. Faulty closure of abdominal wounds.
3. Operations for suppurative processes which of themselves require, for healing, that the abdominal wound be maintained open for a considerable period of time.
4. Drainage.
5. Disturbed wound healing—imperfect asepsis—suppuration.
6. Failure to wear for some months after recovery from operation, a well-fitting abdominal binder.
7. Too early pressure upon the scar.
8. Pregnancy.

The only ventral hernia of the uterine appendages which we could find is a tubo-ovarian hernia in an abdominal scar resulting from the opening and prolonged drainage, ten years previously, of an appendiceal abscess. The scar was about six inches in length. Cullen, to cure this case, resected the entire cicatrix, loosened the adhesions of the omentum to the ovary; then removed the herniated ovary and hydro-salpinx and followed this by closure of the abdominal wound without drainage. A satisfactory recovery was obtained. The sac was incomplete for a consid-

erable distance; the ovary lay directly beneath the skin.

Gluteal, Sciatic or Ischiadic Hernias.

This is a very uncommon condition; in the medical literature of the last one hundred and fifty years, only twenty-three cases are recorded (E. Koeppl). This class of hernias escape from the abdominal cavity by way of either the greater or the lesser sacro-sciatic foramen. There are three varieties: The supra-pyiformis, the infra-pyiformis and the spino-tuberosa. These hernias may be congenital or acquired, may occur on either side of the body and are subject to all the complications of hernia in general. Thirteen of the cases on record were observed in women. Schilbach's case is the only one on record making its exit through the lesser sacro-sciatic foramen. The diagnosis was first made at the autopsy table. During life, there had been genital hemorrhage and symptoms of ileus. At the post-mortem examination, the ovary was found in the hernial sac, the tube and broad ligament being caught in the hernial ring.

We found only two cases of ischiadic hernia of the uterine appendages. Both were acquired hernias of the right tube and ovary, occurring in multiparous patients. Both were subjected to operation and recovered.

Woelfler's case is interesting in that it was successfully subjected to an operation for radical cure. The hernia, an infra-pyiformis one, emerged like all others of its type along the lower border of the pyiformis muscle in close relation to the internal pudic, inferior gluteal and sciatic nerves and vessels. For the previous two years, the patient had had attacks of pain radiating along the course of the sciatic nerve, and abdominal suffering associated with nausea and, at times, vomiting. In the right gluteal region, there could be palpated below the muscles, a globular, fluctuating, fist-

sized, non-reducible swelling from which, at one time, there was removed by aspiration fifty cubic centimeters, and, at another time, five hundred cubic centimeters of dark reddish fluid containing much albumin, red blood corpuscles and leucin-tyrosin crystals.

The following operation was performed: An eight centimeter long incision, parallel to the course of the fibres of the *gluteus maximus*, was made over the summit of the hernial swelling. The muscle fibres were separated; the hernial sac exposed, isolated and opened. It contained the ovary and the end of the tube. The sac contents were ablated; the resulting stump reduced in the abdominal cavity. The sac was then ligated and cut off; after which, the operator closed the hernial orifice by approximating the *pyriformis* muscle to the lesser sacro-sciatic ligament.

Obturator Hernias.

In obturator hernias, the herniated viscus or viscera, always, escape from the abdominal cavity by way of the obturator or sub-pubic canal.

These hernias, though less infrequent than ischiadic hernias, are nevertheless uncommon; not more than two hundred cases are recorded in the medical literature.

They are usually small; may be unilateral or bilateral (are more frequent on the right side); may co-exist with hernias of a different type. They may be reducible, irreducible or strangulated.

Picque and Poirier recognize three main anatomical varieties of obturator hernia. In the first variety, the most common, the hernia follows the entire course of the obturator canal, appearing as a swelling in front of the external orifice of this canal. In the second variety the hernia escapes from the abdominal cavity through the pelvic orifice of the sub-pubic canal, but following the course of the inferior division

of the obturator nerve, does not traverse the canal's entire length, and makes its exit by passing between the superior and middle bundles of the obturator externus muscle. In the third variety, the hernial protrusion also enters the pelvic orifice of the obturator canal, but becomes lodged between the obturator membrane and the obturator externus muscle.

Objective symptoms are frequently absent. When a swelling is visible and palpable, it is usually of small volume and is located in the most internal portion of Scarpa's triangle, somewhat resembling a femoral protrusion. It is, however, non-pedicated and does not extend in the direction of the crural canal. In suspected cases, one should always determine whether there is increased pain when the obturator externus is put under tension—abduction and rotation inward of the thigh.

Vaginal examination is important. The internal orifice of the sub-pubic canal is accessible to the vaginal hand.

Two routes are advised for the treatment of obturator hernias: The abdominal route and the obturator route. In the obturator route, the following steps are employed.

1. An incision eight centimeters long is made about three and a half centimeters internal and parallel to the femoral artery.
2. Separate with a grooved sound the internal border of the pectineus muscle from the outer border of the adductor brevis and adductor longus muscles.
3. If necessary, divide a few of the fibres of the pectineus muscle close to their insertion on the pubic bone, so as to facilitate digital exploration of the obturator region.
4. Expose, isolate and open sac; determine its relation to the obturator nerve and vessels, after which nick constricting point if hernia be strangulated and reduce or ablate hernial contents.
5. Closure of wound.

Femoral Hernias.

Hernias which in their escape from the abdominal cavity pass between Poupart's ligament and the horizontal ramus of the pubis and sooner or later protrude in Scarpa's triangle, are called femoral hernias. Common femoral hernias escape from the abdomen through an orifice bounded anteriorly by the most internal portion of Poupart's ligament; posteriorly, by the horizontal ramus of the pubis; externally, by the femoral vein and the sheath of the femoral vessels; internally, by Gimbernat's ligament. They descend along the most internal compartment of the femoral sheath and ultimately emerge through the saphenous opening. These hernias are contiguous to the femoral vein, which always lies external, and they carry along in their progress through the crural canal a mass of condensed areolar tissue, known as the septum crurale. They show a greater tendency to expand upward than downward, because the cribriform fascia is less adherent to the upper margin of the saphenous opening.

The small number (sixteen cases) of femoral hernias which we were able to collect, as compared to inguinal hernias, confirms the now accepted, but previously disputed fact that, in the female, inguinal hernias are of more frequent occurrence than femoral hernias. All these femoral hernias were of the acquired type; it is known that congenital femoral hernias are pathological rarities. A femoral hernia is essentially a hernia of adult life. Either side of the body may be involved. The tendency to double femoral hernia is less than that to double inguinal hernia. All femoral hernias irrespective of contents or of sex of bearer are of more frequent occurrence on the right side (Wernher, Macready, Berger).

The tubal hernias contained the oviduct either in part or in its entirety, alone or associated with intestine, om-

entum or both. The presence of the appendix vermiformis in a femoral hernial sac is rare. Coley states that in 2200 cases of hernia operated upon from 1890 to March, 1908, in the Hospital for Ruptured and Crippled, the appendix vermiformis alone was found in ten, the cecum and appendix together in seven. In not a single one of Coley's cases was the appendix found in a femoral hernial sac (W. B. Coley, Keen's Surgery, 1908, vol. I, p. 78).

These hernias may be reducible, irreducible or strangulated. Strangulation can occur at any one of the following sites:

- (a) Internal femoral ring.
- (b) Margin of Gimbernat's ligament.
- (c) Margin of the saphenous opening.
- (d) Meshes of the cribriform fascia.
- (e) Irregularities in the hernial sac.

The following operations were performed:

- (a) Amputation of fimbriated end of tube.
- (b) Incision of hernial swelling and creation of an artificial anus.
- (c) Ablation of tube.
- (d) Ablation of ovary.
- (e) Ablation of tube and ovary.
- (f) Excision of hernial sac and return of tube to abdominal cavity.
- (g) Removed tube and ovary and resected gangrenous intestine.

Truss treatment of femoral hernia is notoriously unsatisfactory and is considered as being only palliative and not at all curative. In femoral hernias, on account of motions of thigh, it is difficult to apply, and especially to maintain pad-pressure in a position conducive to closure of the hernial openings.

Coley, whose clinical experience with the treatment and cure of hernia is greater than that of any other living American surgeon, supplements to high ligation and ablation of the hernial sac with the thorough removal of all extra-peritoneal fat the following step: He introduces a purse-string suture of

kangaroo tendon in such a way as to bring the floor of the femoral canal in contact with the roof.

Inguinal Hernias.

Hernias which escape from the abdominal cavity, either through the internal or external inguinal fossae, and which emerge upon the surface when complete by way of the external abdominal ring, are known as inguinal hernias. Of all hernias, they are the ones most frequently noted in the female.

Inguinal hernias of the uterine adnexa may be complete or incomplete. In the incomplete form, the hernia has not escaped beyond the external abdominal ring. Inguinal hernias may be right-sided or left-sided. They may be unilateral or bilateral; as previously stated, all the bilateral hernias of the uterine adnexa, tubal, ovarian or tubo-ovarian, recorded in the medical literature of the last twenty years, were of the inguinal variety. They may be reducible or irreducible. They may be strangulated or the seat of torsion. This last accident has only been observed in congenital inguinal hernias, the contents of which were irreducible.

Of the uncommon types of inguinal hernias only several could be found. There was one direct hernia. This, especially in the female, is an uncommon form. The main characteristics of direct hernias are that the protrusion takes place by way of the internal inguinal fossa, that the neck of the sac is always to the inner side of the deep epigastric vessels and, in the female, that the round ligament is distinct from and to the outer side of the sac. We found three interstitial or intra-parietal hernias. All the other inguinal hernias were of the ordinary type, that is, external or indirect or oblique. An ordinary or oblique inguinal hernia in its course through the inguinal canal (narrower in the female than in the male), is accompanied by the round ligaments; as it escapes from the exter-

nal abdominal ring, it appears in the upper portion of the labium majus, in which it descends to a greater or less extent.

Inguinal hernias vary in size and in form. They may be almond-sized, ovoid, sausage-shaped, pear-shaped, pyriform, globular or other forms too numerous to mention.

Symptoms and Diagnosis.

Hernias of the uterine appendages present all the symptoms common to hernias in general. In some hernias of slow and gradual development, owing to the absence of symptoms, not uncommonly the patient ignores that he has a rupture. Some cases do not give rise to any symptoms; some give rise to very slight disturbances; many remain painless until the appearance of the menses and thus are first recognized at about the age of puberty. Pain may be absent during the entire course of a slowly developing hernia. In other cases, the hernial swelling may be so small as to be completely overlooked by a careless observer. Inspection, palpation and percussion of the hernial regions are routine steps in the examination. After having demonstrated the presence of a hernia, the operator has to determine the type of hernia present and the nature of its contents. The existence of other malformations is to be ascertained, as they may be of such a nature as to partially justify the sacrifice of healthy herniated organs.

Clinicians usually do not experience any difficulty in diagnosing a hernia; at times, they are in doubt as to the type of the hernia present in the case at hand. In fatty individuals, the exact position of the hernial neck is difficult to determine. Obturator hernias are rare, and are found internal to the femoral opening; in femoral hernias, the swelling is found to be almost if not entirely below a line extending from the anterior superior iliac spine to the pubic spine.

In the female, the tumor-mass caused by a complete oblique inguinal hernia, even of a moderate size, will cause a swelling extending into the labium majus.

In some hernias of the uterine appendages, the patients complain of a feeling of weight and discomfort. The symptom "tenderness on pressure" we find frequently reported. Some of these hernias are painless, some are so painful as to interfere very much with the patients' well-being. Impulse on coughing is not infrequently noted. It is not, however, a constant symptom present; it may be absent. Menstrual disturbances are recorded.

If an oblique inguinal hernia be incomplete, that is, if it does not extend beyond the inguinal canal, it may be mistakenly diagnosed tumor of the round ligament, bubo, epiplocele or encysted hydrocele of the canal of Nuck. In tumors of the round ligament, epiploceles, encysted hydroceles of the canal of Nuck, a mistake in diagnosis is not very significant, as in all these conditions one must, to obtain cure, resort to operative treatment and to exposure of the inguinal canal.

Treatment.

Six of the reported cases were either autopsy-table or dissecting-room discoveries. In some cases, the nature of the operative intervention is not stated. In the other cases, the operators, after performing either a laparotomy or a herniotomy, disposed of the herniated organs either by reducing or removing them entirely or by removing a part and reducing the remainder. In some cases, the reduction of the hernial contents necessitated a preliminary division or a dilatation of the hernial rings, internal or external.

In two hundred and thirteen operated cases the results are stated: Eleven deaths; two hundred and two recoveries.

We advise that all hernias of the uterine appendages, irrespective of anatomical site or of size or of age of bearer, be subjected to an operation for radical cure:

- (a) If the hernia be irreducible.
- (b) If the hernia be strangulated.
- (c) If the pedicle of the herniated organ or organs be the seat of torsion.

After the age of two years:

- (a) If the hernia be bilateral.
- (b) If other hernias be co-existent.
- (c) When hernia cannot be painlessly, completely and permanently kept reduced.

(d) If organs other than the uterine appendages be also present in the same hernial sac.

(e) If the wearing of a hernial truss causes pain or aggravates the symptoms.

(f) If the patient has to be subjected to ether or chloroform anesthesia for the performance of an operation of election, double advantage can be taken of this anesthesia, and an operation for the radical cure of the hernia performed.

(g) If patient is exposed to pregnancy.

Operation in uncomplicated hernias of the uterine adnexae is no more dangerous than the operation for the radical cure of other hernias. It has practically no mortality. Infants bear hernia operations remarkably well. Broca performed four hundred and fifty operations in children under fifteen years of age with but one death.

The operation which has given the most universal satisfaction in the treatment of inguinal hernias is that devised by Bassini. It has the advantage of safety, simplicity and efficacy.

We advise operators to observe in their operations for inguinal hernia, the following suggestions:

1. Always wear and have the assistants wear rubber gloves.

2. All ligatures and irremovable buried sutures should be of absorbable material. The purpose of sutures is to keep divided tissues in apposition until organic union has been effected. After this has been accomplished, sutures if not absorbed or not removed may originate irritation, may act as predisposants to inflammation, to sinus formation. We strongly condemn the use of silk for vessel ligation or for buried sutures.

3. Always divide the aponeurosis of the external oblique muscle to an extent sufficient to give a good exposure of the inguinal canal, and of its contents. In the female, the inguinal canal in its normal state and after a hernia operation, in its restored state, should outside of a few arterioles and nerve filaments, contain nothing but the round ligament, a structure much smaller than the spermatic cord. This round ligament comes from the muscular structure of the uterus; it finally becomes lost in the labium majus. In a hernia operation, if not the seat of disease, it should never be sacrificed.

4. Always make a high and careful dissection of the hernial sac from the surrounding tissues and especially from the round ligament, to which it is often quite intimately adherent.

5. Always open the sac and determine by direct inspection and palpation the nature and state of the hernial contents.

6. After reduction or ablation of the hernial contents the sac is to be transfixed and ligated as high as possible. Sac is then removed flush with the peritoneal cavity. So as to prevent the occurrence of peritoneal bulging at the internal ring, we are in the habit of anchoring or fixing the stump of the sac about two centimeters above this point. This is effected by needling each end of the ligature and carrying both ends separately and about one centimeter apart upwards in front of the pro-peritoneal fatty cellular tissue and behind the

transversalis muscle for about two centimeters. The needles and ligature are then passed from behind forward through the transversalis, internal oblique and external oblique muscle, in front of which the ends of the ligature are tied.

7. Never sacrifice the round ligament; it is harmful to the statics of the uterus. Never transplant the round ligament; it is unnecessary. The round ligament is left undisturbed at the bottom of the wound, emerging at the lower angle of the latter; the internal oblique muscle is sutured to the shelving portion of Poupart's ligament; the divided margins of the external oblique aponeurosis are sutured and the skin incision closed. No drainage. After operation, no truss should be worn; a truss does not support the scar, it weakens it.

8. In the female, the internal and external abdominal rings can be closed without detriment to the patient. In direct inguinal hernias, ligation of the deep epigastric artery is at times unavoidable.

In hernias of the uterine appendages, the operator must decide as to whether the hernial contents are to be returned to the abdominal cavity or whether they are to be removed.

As to the herniated tube, ovary or tube and the ovary, when normal, it goes without saying that they should be returned, irrespective of patient's age; if adherent to sac-wall or to some hernial content, the adhesions are to be loosened or divided, and if the organ or organs do not show marked structural impairment, they are to be reduced. These organs, when herniated, should be removed, if they be the seat of:

- (a) Unavoidable or actual gangrene.
- (b) Benign neoplastic disease.
- (c) Malignant neoplastic disease.
- (d) Voluminous cyst-formation.
- (e) Malformation or incomplete development.

- (f) Suppurative inflammation.
- (g) Hematoma or interstitial ovarian hemorrhage.
- (h) Seat of tubal gestation previous or subsequent to rupture of fetal sac.
- (i) Tuberculosis limited to or extending beyond the herniated organ.
- (j) Distortion beyond recognition.
- (k) Such pathological changes as prevent function.

(Concluded in January.)

MEDICAL PROGRESS

Minor Senile Ailments. Dr. I. L. Nascher, special lecturer on geriatrics, Fordham University School of Medicine, has an interesting contribution upon this subject in the October American Journal of Clinical Medicine. The most effective remedy, he says, for the old man's "rheumatics" is to bathe the joint in warm salt water and, after drying, rub in an animal fat or oil; produce a mild hyperemia by means of massage, not by drug irritants. Internal medication is useless. For dyspnea due to stomachic flatulence, lying on the back and the use of tablets of charcoal and sodium bicarbonate often give relief. For senile constipation Nascher is in the habit of prescribing a pill composed of aloin, strychnin and sodium glycocholate, alternating with cascara sagrada (5 grains), with rhubarb (30 grains), and with the ordinary compound cathartic pills, occasionally changing to a dose of saline laxative, or, sometimes, olive oil at night and the salt in the morning. Unless some inflammatory condition is present, senile diarrhea is readily cured by regulation of the diet, giving food at intervals of not less than five hours. For flatulence, "nothing equals charcoal given at the end of the meal." When dribbling urine is due to atony of the bladder or sphincter, the urine should be drawn off by catheter twice a day, and ergot (unless arteriosclerosis) and strychnin given as correctives. True senile pruritus is usually localized about the genitals, and, gluteal region or legs, and for its relief we must try one antipruritic lotion or ointment after another. The offensive odor in bromidrosis can be overcome with cologne water or with a one-half per cent solution of potassium permanganate. Chronic ulcers of the leg should be washed with warm water, then hydrogen dioxide, then again with warm water. Then apply 2% cocaine solution, and a few minutes later destroy the surface slough with a pencil of sulphate of copper or nitrate of silver. After a clean surface has been ob-

tained, wash again with warm water; dry with absorbent cotton and cover ulcer with anhydrous lanolin. The next step is to produce local hyperemia for several hours by applying hot dry cloths or dry cups. If the lanolin has been absorbed in 24 hours, it should be renewed. Mild hyperemia should be well maintained by placing a warm, dry cloth over the wound. Bleeding points are touched with some caustic. Hypostatic edema of the feet may be prevented by the use of a rubber anklet, not fitting too tight. Arsenic and phosphorus are the drugs most serviceable in senile tremor. In congestive headaches, the head should be raised, cold water (not ice) should be applied, and a hot foot-bath given. If there is no arteriosclerosis, ergot may be given in doses of 15 minims of the extract. The senile anemic headache is nearly always due to arteriosclerosis, and is best treated by the recumbent posture, hot applications to the head and the administration of nitrites. Bromids, rest and protection from noise and light are most efficacious for nervous headache.

Modified Cow's Milk as a Substitute Food in Infant Feeding. The subject of modified milk as a substitute food for infant feeding has been studied from many points of view, but two facts are being recognized, more and more, as of prime importance, first, that cow's milk is the most practicable substitute food for infants, and second, that it is just as important that the physical characteristics of cow's milk be modified, as to the proportions of its food elements.

It is along these lines that First Lieut. W. E. Fitch of the Medical Reserve Corps, United States Army, has written a most practical paper upon the subject of "Modified Cow's Milk as a Substitute Food in Infant Feeding," published in *Pediatrics* (October, 1912). He studies the comparative chemical composition of healthy woman's milk and cow's milk, the general availability of cow's milk as a substitute food, the

physical and chemical differences between cow's milk and woman's milk and the modification of cow's milk with cereal decoctions.

He emphasizes the necessity of using pure cow's milk, not milk that has been pasteurized or sterilized, but fresh, wholesome milk from a healthy herd. We all recognize the fact that the milk offered for sale in the large cities is not as pure as it should be, but under the active work of the Boards of Health and the medical profession, it is rapidly improving in quality. When procurable, certified milk should always be used.

Dr. Fitch points out the fact that the modification of cow's milk with a cereal is a mechanical one due to the gelatinized starch, which changes the hard curdling cow's milk into a soft curdling milk like human milk. The casein of cow's milk clots in hard lumpy masses in the infant stomach, the digestive enzymes cannot get at it, and any means whereby we can break up the clot and make it more flocculent, will increase the digestibility of the milk; and this can be done by the use of a properly prepared cereal decoction.

Not only do cereals modify the casein of cow's milk but they, also, through their gelatinized starch, facilitate the digestion of fats, by emulsifying the fats after proteid digestion in the stomach. This is important because as Holt shows, the tendency today is to give a large percentage of fat, and the fats of cow's milk are more difficult to digest than the fats of human milk. With many infants it is often necessary to begin with an amount less than two per cent of fat, and rarely it is necessary to exceed four per cent of fat at any time, and many during the hot weather do better on a reduction to 3 or 3.5 per cent.

Theoretically, the child under six months, because of the deficiency of salivary and pancreatic secretions, is said to be incapable of digesting starches. Practically this is not true. Nearly every fluid in the human economy has a diastatic ferment and as a

matter of fact the very young infant does digest starch. We have seen too many babies successfully fed on arrow root to deny this fact. The author quotes Finkelstein, of Berlin, whose experience and general sound judgment are respected by the leading pediatricians of the world, who is emphatic that very young children are capable of digesting starches, and quotes favorable published opinions by Jacobi, Epstein, Schmid, Minard, Keller, Newman, Heubner and others, while our own Kerley has conclusively shown by his experiments at the New York Infant Asylum, that "There is no age limit for cooked starch feeding."

The addition of cereals to cow's milk is not only allowable, but is to be most warmly recommended, not only in older, but also, in very young infants. The advantages of cereal modification, in addition to the readier digestion and gain in weight, are to be found in the finer sub-division of the casein in the stomach, in the emulsification of the fat, in the disappearance of soapy and dyspeptic stools, in the proteid-sparing power afforded by the cereals, and finally, in the general increment of growth.

This is the experience of the leading pediatricists of the world. Not every infant, by any means, can take cow's milk, or ass's milk or goat's milk; but starch foods may be added with benefit to cow's milk in the majority of cases, is established beyond all question, experimentally, chemically and clinically.

Dr. Fitch then considers the practical details of cereal modification, and gives formulas for milk mixtures, based on years of successful use. He gives, also, clinical reports upon a number of cases had with these formulas.

The article is an exceedingly clear and practical consideration of the much befuddled question of the modification of cow's milk for infant use; and best of all, it contains usable information.

Denver Medical Times

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TRIA JUNCTA IN UNO.

We have much pleasure in announcing that the scope of the Denver Medical Times and Utah Medical Journal will be enlarged with this issue. A new section is added under the title of "NEVADA MEDICINE." The Journal now covers the three most important of our Intermountain Western States, which in the past have been very closely associated in the development of the Great American Desert. The Denver Medical Times, the pioneer Medical Journal of the West, was founded in 1882, by Thomas Hayden Hawkins, whose name will be writ large in the annals of Medicine. In the years that have since passed it has had associated with it the life and brain of the profession, such as Eskridge and others, whose contributions to the science of medicine have made their mark in medical history. But there can be no standing still. Medical Journals must enlarge their bounds and advance with the progressive thought of the day. The recent tendency to establish State Medical Journals has proved to be a failure in the less populated states, both from the Scientific, as also from the financial aspect. Journalism is a profession and cannot be conducted by amateurs with success; the financial end must be controlled and managed by business men. The attempt to oust the Independent Medical Journal from its field of labor has failed, and the Independent Journals are

more strongly entrenched today than at any previous time in their history. The survival of the fittest is the slogan of today, and fitness is shown not alone by age, but by the capacity of self adaptation to the influences of modern thought. The members of the profession of adjoining states naturally come into contact with one another, and their interests being often identical are best represented by a combined journal rather than by separate journals having a very limited circulation and no inherent strength. The Denver Medical Times grasped the situation and added a section devoted to the interests of the medical profession of Utah. Now it takes another step in advance and adds another section dealing with the interests of the profession in Nevada. Each section will deal with the problems of its own state, yet in this Tri-State Medical Journal there will be unity of purpose, thought and action.

Dr. George L. Servoss, of Gardnerville, whose contributions to the Utah Section have been so much appreciated in the past, will take charge of NEVADA MEDICINE with Drs. St. Clair, Robison, Cunningham, Walker, Williamson and Hartzell, of Reno, also Dr. Maclean of Carson City and Dr. John N. Hurty of Indianapolis as Associate Editors. J. A. S.

SO THAT THE PERFECT ONE MAY KNOW.

Our dear friend of the J. A. M. A., in the issue of November 23rd, has had another bad spell. Of course, the talismanic words, "Independent Medical Journal," acts on him like a red rag on a bull. The unfortunate part of it is, that the "Model of all the Virtues" wants to do all the thinking for the entire medical profession, and the medical journals included, and thereby dominate and control the whole proposition.

Kindly, seriously and of a truth, we wish to assert that this cannot be. No more serious and overwhelming blight could fall upon the medical profession and the medical literature of the day than this very thing. As far as we are concerned, we have been here for thirty years, and we are here to stay, to grow, and to perform our part in matters medical.

Then again, the writer of the article in the J. A. M. A. in question in his delirium of iconoclastic irresponsibility, ascribes the article, "The Medical Index Expurgatorius and Independent Journalism," which appeared in our November issue to the wrong Journal, and lays the blame, if any there be, in the wrong place.

Let it be understood, once for all, that this publication combines three independent journals, each edited by a different man; viz.: The Denver Medical Times is edited by Edward C. Hill, M.D., of Denver; The Utah Medical Journal is edited by Frederic Clift, M.D., Layton, Utah; Nevada Medicine is edited by George L. Servoss, Gardnerville, Nevada; and the writer really believes that all of these gentlemen are fully able to defend themselves and "make good" on any subject they may write, so that the article in question, although it was attributed to the Denver Medical Times, yet the editor of the

Denver Medical Times had no more to do with it than the man in the moon, since the article appeared in the Utah Medical Journal. However, the writer of it may have more to say on the subject in an early issue.

Of one thing the "Omnipotent Censor" of the Medical profession of the United States may rest assured, that "the end is not yet." Just when the Almighty vouchsafed to the political manager of the J. A. M. A. a dispensation allotting him all the brains, knowledge, capability and the right to think for everybody, and made him dictator for the whole medical profession of this country, has not yet been fully and satisfactorily explained.

When the "Official Circle" of the J. A. M. A. keeps within its proper sphere, then we have nothing but the highest admiration for it, but the attempt to batter down anybody and everybody who differs from it, will be resented by us and all Independent Journals to the uttermost.

By nature we are not belligerent, but if we are forced into a scrap some of the "high muck-amucks" of the "Star Chamber" of the J. A. M. A. will know that we have been in it, before we quit.

In order to somewhat clear up the situation, we may state that this little preachment is made by the Business Manager.

Jno. A. Stinson.

PRACTICAL POINTS IN THE DIFFERENTIAL DIAGNOSIS OF COMA.

Under the heading, "The Differential Diagnosis of Alcoholic Coma," Dr. Hubert V. Guile (Medical Record, Oct. 19), bring out a number of practical points worthy of repetition: In alcoholic coma the pulse is usually regular, often rapid, and its tension is invariably low. The temperature is often subnormal, especially after exposure. The pupils are moderately dilated (rarely pin-point), and dilate more upon slapping the face or pinching the skin of the side of the neck. Gastric lavage usually shows alcohol in excessive amounts, and after such stomach washing the patient should begin to regain consciousness within a few hours.

Subcutaneous emphysema, particularly about the mastoid and frontal sin-

uses, and ecchymoses on the forehead, beneath the eyes or conjunctiva, or over the mastoid cells, are very suggestive of cranial fracture. Coma associated with glycosuria, with no acetone or diacetic acid in the urine, also points toward intracranial injury.

In 70 to 80 per cent of cases of cerebral hemorrhage, paresis or paralysis accompanies the coma. In the remaining 20 or 30 per cent the hemorrhage is very extensive and often of the intraventricular type; coma is deep and far more sudden than alcoholic stupor. Many of these cases have shown previous transitory signs of paralysis (lesion of internal capsule). The skin is sometimes bathed in profuse perspiration. The limbs may be absolutely flaccid or completely rigid. Characteristic of apoplectic conditions, and opposed to the diagnosis of alcoholic coma are: a slow, full, high tension pulse, increas-

ing in tension as respirations become slower; a rapidly rising temperature without any apparent reason; and the presence of a Kernig, Babinski or Gordon reflex and of true ankle clonus, or the unilateral loss of the superficial reflexes.

Some cases of uremia are indistinguishable from alcoholic coma, except that the former state is far more likely to terminate fatally. Anemia, edema, hypertension, anuria or oliguria and albuminuric retinitis are, of course, when present, in favor of a diagnosis of uremia, and are of special value in those patients in whom the urine shows nothing characteristic. Dr. Guile asserts that the phenolsulphonephthalein test of renal function has proved of the utmost value in the diagnosis of uremic coma, since many of the grave cases show a phthalein elimination ranging from zero to a faint trace within two hours. The diagnosis of diabetic coma rests essentially on the diabetic history, the sweet, fruity odor of the breath and the presence in the urine of grape sugar and acetone bodies.

Epileptic convulsions, followed by profound stupor, are often precipitated by an alcoholic debauch. One should search for the presence of bromids on the person and for the card, stating that he is subject to fits, which many epileptics carry. "Numerous scars about the head and old lacerations of the tongue, coupled with the fact that epileptics frequently show the stigmata of degeneration, are all of diagnostic value." Epileptics either promptly regain consciousness, pass into postepileptiform excitement or confusion, or develop the status epilepticus.

Morphin and chloral are the most frequent causes of narcotic coma, if we except phenol, which frequently closely simulates poisoning by opiates. Morphin produces pin-point pupils (so does phenol), and marked slowing of the pulse and respiration. The patient can usually be partially aroused, save in the

most serious cases. Chloral poisoning resembles the third stage of ether narcosis, except that the face is white and livid and the skin is bathed in cold perspiration. The pupils at first are moderately contracted; later, dilated. The reflexes are lost comparatively early.

According to Guile, pachymeningitis hemorrhagica interna is so often found at autopsy that it forms a strong contrast to the infrequency with which the diagnosis is made clinically. "Persistent headache, occurring in a chronic alcoholic without any apparent reason, or following a severe head injury associated with periodical and transitory attacks of paralysis, cortical in type, is suggestive of pachymeningitis hemorrhagica interna." Uremia and cerebral syphilis must be excluded by the usual tests.

Hysteria simulating coma should be readily recognized. "The peculiar insincerity of the clinical picture, the tendency to pose, the rolling of the eyes, the contrast between the pharyngeal, conjunctival and cutaneous anesthesia and the prompt reaction usually obtained from a whiff of ammonia applied to the nose, are inconsistent and quite characteristic of the condition." The Stokes-Adams syndrome (auricular dissociation and cerebral anemia from heart block), is manifested by short attacks of coma, extremely slow radial pulse and pulsation of the jugular bulb. Sunstroke is differentiated by the occupation, time of year, sudden onset, extremely high temperature and contracted pupils. General paresis, cerebral syphilis, meningitis and brain tumor are also to be considered as important causes of coma and, generally speaking, the differential diagnosis should be made by a process of exclusion.

THE DOSAGE OF VACCINES.

That the use of vaccines has become a permanent part of the practitioner's resources, can hardly be doubted. The

question of dosage and of intervals between doses is still a vexed subject for thought and discussion. All of us who have used vaccines for some time have noted the general tendency to employ larger doses, except of tuberculin.

The opsonic index as a guide is quite impracticable, for the average patient's purse. Moreover, "in many cases of pulmonary phthisis, and indeed, in most where pyrexia is marked, the fluctuations are so marked, and the alterations in index so rapid, that in the interval between taking the blood-specimen and completing the index determination the blood condition may have completely altered." "For my own part," says Allen, "I should attach much more importance to improved pulse and general condition than I should to raised opsonic index if these failed to show improvement."

The size of the initial dose should be smaller and the interval shorter, the more acute the condition. For example, in streptococcal septicemia a safe initial dose would be 5,000,000 to 10,000,000, repeating injections every second to fourth day, as guided by the pulse, temperature and general condition of the patient. The dose remains the same if improvement ensues; otherwise it should be doubled each time.

Charles E. Simon, in his just published work upon "Infection and Immunity," says: "We have sufficient evidence to show that much larger doses than the maximal quantities now recommended may be given in most cases. In one or two instances I have indeed received the impression that the patient owed his recovery from serious illness to the injection of a quantity of organisms, which was many multiples of the maximal dose usually recommended. If the symptoms become aggravated, the dose should be diminished and the ascent carried out less abruptly and possibly at somewhat longer intervals (10 to 14 days or longer). Generally speaking, in the more acute cases the smaller doses

should be chosen to begin with, and the larger ones reserved for the more chronic ones." As standard doses of the common bacterial vaccines he enumerates the following: *Staphylococcus aureus*, 50,000,000 to 500,000,000 or more; *Staphylococcus albus* and *citreus*, 100,000,000 to 1,000,000,000 or more; *Streptococcus pyogenes*, 5,000,000 to 100,000,000 or more; *Gonococcus*, 5,000,000 to 100,000,000 or more; *Friedlaender's bacillus*, 10,000,000, to 100,000,000 or more; *colon bacillus*, 10,000,000 to 100,000,000 or more. As to tubercle vaccine, it is recommended to begin with very small doses (1/30000 to 1/15000 mgm.) and to continue the same dose or gradually increase it, according to the indications of the individual case.

Chronic infections require much larger doses of the causative organisms than do acute cases. In acne, for instance, a fair initial dose is 250,000,000 of the particular *staphylococcus* present, along with 5,000,000 *acne bacilli*. In general, the clinical negative phase (malaise, local soreness, rise of pulse and temperature), as in tuberculosis, should not last more than one day, and the intervals of treatment should be from four to eight days. Opsonins appear to be formed chiefly in the subcutaneous connective tissue; hence the vaccine is best injected just under the skin (at the insertion of the deltoid muscle or between the shoulder blades). The next injection had best not be given (at another site) until any subcutaneous lump produced by the last treatment has been absorbed. There seems almost no limit to dosage in these chronic infections (excepting tuberculin in tuberculosis). Thus, Allen has employed as a single dose 1,000,000,000 bacilli of *Friedlaender, B. influenzae* or *M. catarrhalis*, and 500,000,000 *M. paratetragenus*, pneumococci or *B. septus* in the treatment of chronic catarrhs. For prophylactic purposes the largest doses are employed, the routine

inoculation against typhoid consisting of three injections (the first, one-half billion; the second and third, one billion each) of *B. typhosus* at ten-day intervals.

MODIFIED MILK IN INFANT FEEDING.

The October issue of *Pediatrics* contains a paper giving a practical resume of existing knowledge upon the modifi-

cation of cow's milk as a substitute infant food. The author has made a comprehensive study of the subject from all points of view, and dwells especially upon the value of cereal decoctions in the modification of cow's milk. In this issue, there is given a short abstract from the paper, showing its scope and character. The practical nature of the paper will appeal to the general practitioner, and copies can doubtless be had of the author.

PERSONALS

By the Editor and Associate Editors.

Dr. H. G. Wetherill is enjoying a new Chalmers car.

Dr. Wm. M. Spitzer has ascended to 630 Metropolitan Building.

Dr. W. T. Bronson of Pueblo has been visiting friends at Streator, Ill.

Dr. George Neuhaus is improving rapidly after a serious abdominal operation.

Dr. B. L. Jefferson is a candidate for the position of Secretary of the Interior.

Dr. J. W. Glass, recently of Chattanooga, Tenn., has become a resident of Pueblo.

Dr. and Mrs. J. A. Black of Pueblo are visiting New York and other eastern points.

Dr. J. C. Smith, formerly of Glenwood Springs, has moved to Hutchinson, Kansas.

Drs. Spivak, Hillkowitz and W. W. Grant were recent visitors in the American metropolis.

Dr. A. J. Monahan of Pueblo accompanied a patient to California the middle of last month.

Dr. Ambrey H. Williams had an enjoyable hunt in the Jackson Hole country late in October.

Dr. M. D. Healy is spending a few weeks in Chicago, attending the clinics of Dr. J. B. Murphy.

Dr. C. E. Spicer, formerly of the Red Cross Hospital, Victor, has fitted up offices in the Cooper Building, Lamar.

Mrs. Julietta E. Dorland, mother of Dr. W. L. Dorland of Pueblo, passed away Nov. 17, at the ripe age of 90.

Dr. and Mrs. John D. Crisp had an enjoyable hunting trip in western Nebraska in the middle third of November.

Dr. Lucas, formerly of Denver, but now of Gooding, Idaho, was operated upon re-

cently for appendicitis at St. Anthony's Hospital.

Dr. George H. Stover, writing from Honolulu November 12th, says: "Will be in Denver in two to three weeks—good as new now."

The Lane Medical Library of the Leland Stanford Junior University was dedicated with fitting ceremonies on Sunday, November 3rd.

We regret to note that Dr. Carl Johnson, formerly of Denver and Montrose, recently a resident of Los Angeles, has been stricken with paralysis.

Dr. Perry F. Purdue of Sterling is up and about, after three months' confinement in the hospital, due, so his friends say, to overwork.

Dr. James B. Gaston of Cripple Creek died suddenly of apoplexy, Nov. 16. He was seated in his office chair, talking with friends, when the end came.

Dr. J. H. Smith of Pueblo was found dead in his office in the Board of Trade Building, November 10th. His death is attributed to an overdose of morphin, taken for neuralgia.

Dr. Charles F. Shollenberger gave an interesting stereopticon lecture upon his travels in the far East before the members of the Womans Club, Thursday evening, November 14.

We are pleased to note that Dr. Ella A. Mead, of Greeley, who has been sick for weeks in the hospital, and who was operated recently by Dr. Carmody for mastoiditis, is again up and about.

Dr. W. J. Le Rossignol of Rifle and Dr. Arthur E. Gill of Gulch represented the Western Slope at the second semi-annual

clinic of the Medical Society of the City and County of Denver.

Dr. and Mrs. Charles F. Shollenberger will leave Denver in January for a trip to the Panama zone. They expect to return by way of Washington, in time to attend the inauguration of President Wilson.

Dr. Nathan B. Newcomer, of Paonia, stopped in Denver to greet old friends the latter part of November, while on a business trip to Wyoming. Dr. Newcomer is looking fine, and his "corporosity" is on the increase.

Dr. H. G. Maul, pathologist of the Nebraska State Insane Asylum at Ingleside, visited his mother and old friends in Denver last month, after six weeks of practical post-graduate study in Chicago and New York. Dr. Maul has an abundance of both brains and energy, and is certain to do well whatever he undertakes.

The American Association of Clinical Research held its fourth annual meeting, Nov. 9, in Dubois Hall, New York Academy of Medicine, Dr. Alvin Roy Peebles of Boulder presiding. Application blanks for membership in this society can be obtained from the secretary, James Krauss, M. D., 419 Boylston Street, Boston.

Dr. Frank G. McCartney recently bagged a buck while hunting in Moffat County. This region was burned over in the Indian uprising some thirty years ago. A very thick new growth of scrub oak has appeared, and quite a number of hunters there this fall suffered with symptoms of "poison oak," similar to those from poison ivy.

Dr. Agnes Ditson of Denver delivered a series of weekly lectures (October 2-November 6) upon the evolution, anatomy, physiology, pathology and sociology of sex and sex education, for the Civic League of Colorado Springs before the women teachers of that city. The lectures were of a high grade from both the scientific and the literary standpoint. They were very well attended and evoked great interest.

The Northern Colorado Osteopathic Association held its annual meeting (says the Longmont Ledger) at Longmont, Saturday evening, Nov. 9. The subjects discussed were dietetics and the diseases prevalent at this season of the year. Seventeen members and their wives sat at the succeeding banquet in the Imperial Hotel. Dr. W. R. Benson was chosen president for the ensuing year, and Dr. Bowersox, secretary.

The second semi-annual clinic of the Medical Society of the City and County of Denver was a thoroughly representative and satisfactory affair, thanks largely to the committee (Drs. Eichberg, Markley, Carmody and Blickensderfer) who had the arrangements in charge. No favorites were played and everybody was welcome. The out of town visitors, about 80 in number, as well as the home folks, felt well repaid for the time and money spent. At the good-fellowship meeting, evening of Nov. 15, in the cathedral room of the Albany, over 200 good fellows were present in the body and were entertained in the recherche manner in which members of the medical profession are accustomed to relax, namely, with beer, salads, Swiss cheese, sandwiches and divers German preparations of hog; also coon songs, bunny hug dances, etc., etc.,

DEATH OF DR. GALLOWAY.

Los Angeles, Cal., Nov. 8, 1912.

Editor Denver Medical Times,
Denver, Colorado.

Dear Doctor:—I am enclosing a notice of the death of Dr. B. S. Galloway, which I thought might be of news interest to you.

Bradford S. Galloway, M. D., University of Michigan, Ann Arbor, 1880, a prominent practitioner, died suddenly on November 2, 1912, at Los Angeles, California, from embolism.

After Dr. Galloway's graduation he located at Leadville, Colorado, where he practiced for twenty-three years. He was chief surgeon for the Colorado Midland Railway for three years, and local surgeon for the Colorado Southern for twenty years. After leaving Leadville he practiced in Denver, Colorado, for two years. Leaving there, he located in Goldfield, Nevada, where he practiced for five years. He had been a resident and practitioner of Los Angeles, California, for the past four years.

Dr. Galloway was a man of high integrity, a thorough and painstaking physician, a beloved physician and an ideal friend.

Yours very sincerely,

DONALD W. SHEEL.

SCIENTIFIC LESSON FROM THE ATTEMPTED ASSASSINATION OF COLONEL ROOSEVELT.

My dear Sir:—

I beg leave to call your attention to a plan to lessen or prevent crime and other ab-

normalities, especially such as the attempted assassination of Colonel Roosevelt. I shall be very grateful for the honor of your editorial aid.

I have been advocating in congress, legislatures, and with mayors of large cities, for many years this plan. It is to establish laboratories or bureaus for the scientific investigation of criminals and other dangerous abnormals. I believe that every large city, every state and especially the federal government, should have such a laboratory.

When any one sends to the president, the governor, or mayor, or any prominent citizen threatening letters, or repeatedly utters threatening words, or attempts to injure such officials, or is unreasonably insistent in demanding to see them personally, such individual should be detained at least a few hours and thoroughly studied by scientific experts in criminal anthropology, psychophysics and social pathology.

Laboratory Bills have been introduced by Senator Southerland and by Representative Clayton and are now pending before the Judiciary Committees of both Houses of Congress. The members of these committees are as follows. Committee on Judiciary of the Senate: Senators, Clark of Wyoming (chairman), Nelson (Minn.), Dillingham (Vt.), Southerland (Utah), Brandegee (Conn.), Borah (Idaho), Brown (Neb.), Cummings (Iowa), Root (N. Y.), Bacon (Ga.), Culberson (Tex.), Overman (N. C.), Rayner (Md.), Paynter (Ky.), Chilton (W. Va.), and O'Gorman (N. Y.). Committee on Judiciary of the House: Representatives: Clayton of Alabama (chairman), Henry (Tex.), Webb

(N. C.), Carlin (Va.), Rucker (Mo.), Floyd (Ark.), Thomas, Jr. (Ky.), Graham (Ill.), Dupre (La.), Littleton (N. Y.), McCoy (N. J.), Davis (W. Va.), McGillicuddy (Me.), Sterling (Ill.), Moon (Pa.), Higgins (Conn.), Howland (Ohio), Nye (Minn.), Norris (Neb.), and Dodds (Mich.).

By patient study of dangerous, unbalanced and often illusioned persons, who may be called mattoids, their eccentricities and peculiar behavior can be determined to such an extent that we may detect them in advance. At present it is almost impossible to do this, because of little or no knowledge concerning them. This ignorance is due to want of systematic, scientific and socialologic investigation.

Millions of dollars are annually expended by our government for the scientific investigation of the antecedents, peculiarities and behavior of some little bacillus, causing the death of plants or animals, but little or nothing is given for a similar study of the larger human bacillus, which has caused this country to suffer losses beyond human calculation.

Who can estimate the injury and cost to the United States of the assassination of Garfield and McKinley? Shall we wait till more presidents, governors, mayors, or other distinguished citizens lose their lives at the hands of assassins, before we begin a study of such dangerous individuals?

I am

Very sincerely,

ARTHUR MacDONALD.

"The Congressional,"

Washington, D. C., October 30, 1912.

FOREIGN JOURNALS

(Translated by Joseph Cuneo, M.D.)

A Case of Perithelioma of the Hard Palate, by Angiolo Tori, assistant of Prof. Anziolotti, Surgeon of the Royal Hospital of Leghorn. The patient is a man of the age of 45 and a laborer, strong and well developed. With the exception of malaria, that lasted about a month, he has never had any serious malady. He has never had any venereal diseases. In regard to syphilis, the test was negative.

Forty days previous to consulting the author, patient noticed a tumefaction on the hard palate, which continued to increase in size, disturbing the movements of masti-

cation and deglutition. It never caused pain, and he never noticed in the mouth the presence of exudate or blood.

Examination of the Mouth:—Lips, gums, tongue and soft palate normal. The nasal cavities negative. On the palatine arch, almost in the middle line, was visible a swelling, the shape and size of a large English walnut, well limited. The tumor was firmly implanted, so much so that it could not be moved in any direction, and was covered with a very adherent mucous tissue of a normal color. On palpation no increase of temperature could be noticed, nor

any fluctuation or pulsation. It seemed to be a solid uniform tumor.

The exploratory puncture gave only a few drops of blood, which the microscopical and bacteriological examination proved negative, and confirmed the hard consistency of the tumor. The adjacent lymphatic ganglia were normal.

Operation:—Under morphin-chloroform anesthesia, the author incised the mucous tissue with an elliptical cut in the anterior-posterior direction. Having ligated some small branches of the anterior and posterior palatine arteries, he removed the tumor in its full integrity, cauterized the cavity and closed it with catgut stitches, leaving a small drainage tube. The patient after nine days left the hospital, entirely cured. The patient was examined for several months and was found in perfect condition, with no signs of relapse; the cicatrix was hardly visible.

Macroscopical Examination:—The tumor was ovoidal in shape, surrounded by a thin capsule, very adherent. The tumor was cut in two, and its interior was found to have a red-gray color, with numerous small holes, which represented so many minute blood vessels, from which blood exuded, not in a small quantity.

Microscopical Examination:—The mucous membrane was normal, and sub-mucous tissue, having thickened, formed the capsule

of the tumor. The connective tissue of which the capsule was formed was found to be rich in cells and blood vessels, intersecting the tumor in many zones. The neoplastic nodules had all, as a center, blood vessels. Each nodule was composed of neoplastic cells, grouped around a blood vessel, which was like the center of irradiation of such elements. Said cells were large, ovoidal in shape, very close to one another, many of them with the interposition of very fine connective fibers.

The protoplasm was homogeneous and transparent, and it presented contours not well limited. The nucleus of the nodules was very large, and almost always with one or more nuclei. The disposition of said cells was characteristic, for the fact that a first layer surrounded perpendicularly all the blood vessels.

The conclusion of the author is that the case was one of active neoformation of blood vessels, forming the mass of the tumor, of an enormous cellular proliferation around the vessels, of an abundant connectival stroma, a hyaline degeneration of the connective tissue of the walls of the blood vessels and of the interstitial connective tissue. Doctor Tori says that the case was one of a tumor whose principal character is furnished by the reproduction of the cells surrounding the blood vessels; which Eberth called perithelioma. (*La Riforma Medica*, Naples, September 28, 1912.)

BOOKS

Essays on Genitourinary Subjects. By J. Bayard Clark, M. D. Published by William Wood & Co., New York. Price, net, \$1.25.

A collection of short articles on genitourinary subjects. The number of requests for reprints of articles which Dr. Clark has written during the past few years has caused him to collect and publish in book form the most popular of them.

Due to the fact that the knowledge of most of the subjects treated has advanced materially in the growing field of genitourinary medicine and surgery, the author has added to each a few paragraphs in an endeavor to bring down to date the article in hand.

In our opinion this is objectionable, for it seems it would have been far better for Dr. Clark to have rewritten entirely all of the articles, omitting such stuff as has been discarded and practically forgotten, and to

have installed the new material into them, making the whole a more readable and desirable volume.

The subjects of the last three chapters, which are newly written, are well chosen and admit of much interesting discussion, but the author has barely warmed up to each, and by the time we are interested he abruptly closes, leaving one to figure out for himself just what the writer had in mind.

J. B. D.

The Blood of the Fathers. A Play in Four Acts. By G. Frank Lydston. The River-ton Press, 626 South Clark Street, Chicago.

Dr. Lydston has that gift so rare in medical writers—a true literary quality, which makes all that he writes fix itself in the attention. In this all too true melodrama of mismating and its fateful ending, each char-

acter stands out clearly and naturally, in artistic subjection to dramatic harmony. The book is one which medical practitioners will appreciate above all other men. It points the moral beyond compare of any long lecture or sermon, and is withal most enjoyable.

E. C. H.

A Treatise on Diseases of the Hair. By George Thomas Jackson, M. D., Professor of Dermatology in the College of Physicians and Surgeons, Medical Department of Columbia University, and Charles Wood McMurtry, M. D., Instructor in Dermatology in the College of Physicians and Surgeons, Medical Department of Columbia University, New York. Octavo, 366 pages, with 109 engravings and 10 colored plates. Cloth, \$3.75, net. Lea & Febiger, Philadelphia and New York, 1912.

Except the smaller volume on diseases of the hair written by Dr. Jackson many years ago, this is the only medical treatise on the subject in the English language. It is complete in every regard and conveys the latest authoritative information regarding the bacteriology of scalp diseases, as worked out by Sabouraud of Paris. The text is profusely and beautifully illustrated, many of the plates being original with Darier and with Rainforth. In the loose multitude of empirical formulas which have been handed down for decades as to the treatment of diseases of the hair and the scalp, this work furnishes a sure scientific foundation for the accurate study and treatment of such cases and will doubtless find a warm welcome at the hands of physicians in general. It is interesting to note that the authors state that "sudden change of color of the hair from its normal hue to perfect white has been too well authenticated to allow of a doubt as to its occurrence," and cite a number of instances in support of the belief.

Diseases of the Stomach, Intestines, and Pancreas. By Robert Coleman Kemp, M. D., Professor of Gastrointestinal Diseases, New York School of Clinical Medicine. Second edition, revised and enlarged. Octavo of 1021 pages, with 388 illustrations. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, \$6.50, net; Half Morocco, \$8.00, net.

This latest work of Kemp is a complete epitome of the present status of knowledge of Diseases of the Stomach, Intestines and Pancreas revised up to the present moment.

This 1000-page volume maintains the high standard of the bookmaker's art which char-

acterizes all of the W. B. Saunders publications.

The work is divided in four parts.

Part 1 comprises a study of the anatomy and physiology of the alimentary tract, together with a consideration of the best methods of eliciting history and determining physical conditions.

Part 2 discusses diseases of the stomach, giving methods of examination by transillumination, by direct electrical, X-ray and radium apparatus, as well as physical, chemical and mechanical methods. The pathology and treatment of several diseases are exhaustively dealt with. There is to be found an especially interesting and comprehensive study of neurosis of the stomach, both primary and secondary. Glenard's disease, gastropotosis, which still offers an alluring field to the ingenious surgeon, is discussed at length.

In part 3, more than 400 pages are devoted to a study of diseases of the intestines. Every phase of intestinal disorders from simple catarrh to malignant neoplasms has received proportionate consideration. A most interesting section is that devoted to appendicitis and diverticulitis.

The last 100 pages of the volume, Part 4, considers that long neglected yet most important organ the pancreas, discussing it from histologic and physiologic as well as pathologic standpoints.

The only adverse criticism that I can offer is that the book is perhaps over illustrated; especially is this true of the section devoted to diseases of the stomach.

The work as a whole is a most valuable one, and not the least valuable portion to the busy practitioner is a carefully prepared exhaustive index.

B. O. A.

The Immediate Care of the Injured. By Albert S. Morrow, M.D., Adjunct Professor of Surgery in the York Polyclinic. Second Edition, Revised. Octavo of 354 pages, with 242 illustrations. Philadelphia and London. W. B. Saunders Company, 1912. Cloth: \$2.50 net.

An invaluable work primarily intended for laymen, who, acquainted with its precepts, are in a position to render often invaluable immediate assistance to those injured or in emergencies, as poisoning or drowning. It is clear, concise and interesting, with many illustrative cuts that are self-explanatory.

The improvisations of slings, bandages and litters for transportation of injured in

accidental cases are not easily found in the usual surgical works, and it seems to your reviewer that the work is especially valuable for practitioners, city or country, who, away from usual equipment in an emergency, could improvise with material found anywhere that which would most effectively first aid the patient and reflect great credit upon his professional skill.

The work can be unhesitatingly recommended.

P. J. POTHUISJE.

The Physician's Visiting List (Lindsay & Blakiston's) for 1913. Sixty-second Year of its Publication. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. Regular, perpetual and monthly editions. Price of regular edition, \$1.25.

This neat, compact and in every way satisfactory and desirable pocket volume for all those who use a visiting list, now makes its annual appearance, reminding us that the new year is very near.

A Text-Book upon the Pathogenic Bacteria and Protozoa. For students of medicine and physicians. By Joseph McFarland, M.D., Professor of Pathology and Bacteriology in the Medico-Chirurgical College, Philadelphia. Seventh edition, thoroughly revised. Octavo of 878 pages, 293 illustrations, a number of them in colors. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, \$3.50 net.

In the present edition of this deservedly popular work its scope has been enlarged to include the pathogenic protozoa, thus making the treatise complete from the medical standpoint. The frequent revisions which the author has been called on to make has permitted him to bring the work to the highest standard of utility, both for students and for practitioners. The text is very handsomely illustrated, and two copious indexes facilitate speedy reference to any desired point or author. It is almost startling to note that only eighteen years ago Dr. McFarland was appointed to give the first systematic course of lectures upon bacteriology in the medical department of the University of Pennsylvania.

E. C. H.

Surgical After-Treatment. By L. R. G. Crandon, M. D., Assistant in Surgery at Harvard Medical School, and Albert Ehrenfried, M. D., Assistant in Anatomy at Harvard Medical School. Second edition, practically rewritten. Octavo of 831 pages, with 264 original illustrations. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, \$6.00 net; half morocco, \$7.50 net.

A book of great value to all students of medicine and surgery, especially adapted to those making a specialty of surgery. The book is well written; it is comprehensive and concise, giving method and details of treatment and care of patients which, though often simple, are neglected.

Part One covers in a thorough manner general treatment following anesthesia, its complications and sequelae. Other conditions and symptoms following operations such as thirst, pain, variations of the pulse, temperature and respiration, hemorrhage in its different forms, coma and the toxemias, together with post-operative methods of feeding, are carefully considered. Attention is paid to minor details of treatment of patients with infected and septic wounds, which we meet every day, as well as those conditions which are met only at rare intervals. The treatment of patients preparatory to operation is carefully considered as well as after operative procedure.

Part Two takes up the different parts of the body, giving the general and special treatment necessary after operation on each part, beginning with the head and face and extending to and including the extremities, the after treatment of nerve and arterial injury, fractures, bone injury and disease, and amputation with its complications. This division closes with an excellent and thorough explanation of vaccine therapy and immunization with its clinical application.

The book as a whole represents one of the most complete and up-to-date works on surgical after-treatment that we have at our command.

A. T. MONISMITH.

The Practitioner's Visiting List for 1913. An invaluable pocket-sized book containing memoranda and data important for every physician, and ruled blanks for recording every detail of practice. The Weekly, Monthly and 30-Patient Perpetual contain 32 pages of data and 160 pages of classified blanks. The 60-Patient Perpetual consists of 256 pages of blanks alone. Each in one wallet-shaped book, bound in flexible leather, with flap and pocket, pencil with rubber and calendar for two years. Price by mail, postpaid, to any address, \$1.25. Thumb-letter index, 25 cents extra. Descriptive circular showing the several styles sent on request. Lea & Febiger, Publishers, Philadelphia and New York.

Being in the twenty-ninth year of issue, this visiting list has been perfected as to

record blanks, printed emergency data and other useful reference matter, notably the table of doses and the alphabetic table of diseases and remedies. The book is equally handsome, durable and convenient.

An Introduction to the Study of Infection and Immunity. Including Serum Therapy, Vaccine Therapy, Chemotherapy and Serum Diagnosis. By Charles E. Simon, M.D., Professor of Clinical Pathology and Experimental Medicine, College of Physicians and Surgeons, Baltimore. Octavo, 301 pages; illustrated. Cloth, \$3.25, net. Lea & Febiger, Publishers, Philadelphia and New York, 1912.

The first eleven chapters of this scholarly treatise are devoted to the "conflict which takes place when the opposing forces of the invading and the invaded organisms are brought together." In this portion of the text we find a graphic and scientific exposition of aggressins, toxins, phagocytosis, opsonins, alexins, leukins, allergia, agglutinins, precipitins, anaphylaxis, idiosyncrasies and the various forms of immunity. Ehrlich's side chain theory is presented in extenso, with two diagrammatic color plates. Active and passive immunization each form the subject of a masterly chapter. The limitless possibilities of chemotherapy are exemplified in a chapter on salvarsan and neosalvarsan. The diagnostic applications of immunologic principles, in agglutination, bacteriolytic and precipitin reactions, complement fixation

and the tuberculin and luetin tests, fitly complete a volume of inspiring ideas and almost romantic interest.

E. C. H.

Medical Record Visiting List or Physicians' Diary for 1913. New Revised Edition. William Wood & Company, 51 Fifth Avenue, New York.

In addition to the usual visiting list and special memoranda blanks, this handsome pocket companion contains much and various information for ready reference, including a chart for prognosticating labor, dose tables, dentition, disinfection and anti-sepsis, emergencies, and many useful miscellaneous facts, such as the number of drops in a fluidram and the preparation of solutions for subcutaneous injection and for atomization and inhalation, artificial respiration, signs of death and notes on making wills. This visiting list is procurable in three regular forms (30, 60 and 90 patients a week) at \$1.25, \$1.50 and \$2.00. It can also be obtained with name stamped upon the list and along with genuine seal and calf skin wallets.

Rebman Company, 1123 Broadway, New York, have just issued a complete catalogue of their medical publications, with comments from medical journals, which will be sent to any physician, post free, on request. The books are all of recent date, and many of them, the atlases and monographs particularly, are of unique interest and value.

Utah Medical Journal

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THE UTAH PLAN.

A QUINTETTE OF LAWS TO CONTROL SOCIAL IMMORALITY.

The "Utah Plan" was inaugurated in the legislature of 1911 by the passage of a law requiring the notification of venereal disease. Utah was the first state to adopt such a law; its example, however, has since been followed by several other states, New York being the latest convert to this method of dealing with sexual diseases.

Experience has taught the necessity for a further advance along the lines of preventive measures for the protection of innocent wives and the rights not alone of unborn but of children yet to be conceived. The future child claims his birth-right—the right to be conceived by clean parents, clean not only morally, but free from hereditary defects following sins of commission and omission. He refuses to be the depository of the sins of his forbears unto the third and fourth generation. On behalf of our children and their descendants the Utah legislature, 1913, will be asked to enact into law four new measures with a view to controlling the evils resulting from unrestrained sexual intercourse.

The four laws suggested in the resolutions of the State Medical Association are:

- (1) A CERTIFICATE OF HEALTH BEFORE LICENSE TO MARRY.
- (2) THE STERILIZATION OF CRIMINALS AND DEFECTIVES.
- (3) THE WILFUL COMMUNICATION OF VENEREAL DISEASE.
- (4) GONORRHEA CURES.

These four laws, with the notification law of 1911, will form a quintette of laws that "will prove a powerful deterrent against illicit indulgence," and the evils of Clandestinitism and Public Prostitution.

THE UTAH OFFICIAL ORGAN.

The so-called "Official Journal of Utah State Medical Association," Northwest Medicine, is somewhat behind the times in obtaining its official items. In the November issue of the "OFFICIAL" the only item of Utah news is somewhat belated. It solemnly asserts that the Utah State Association will meet at Ogden on 24-25, September, 1912, instead of in Salt Lake in 1913. It also asserts that Dr. Fisher is still President. For the information of the members of the Association who do not subscribe to this Journal and for the instruction of the Seattle "official organ" we reprint an item which appeared in our October issue a few days after the annual meeting, and which failing information from their correspondent we give them permission to reprint. **"THE MEETING AT OGDEN WAS A SUCCESS. DR. ANDREW J. HOSMER OF SALT LAKE WAS ELECTED PRESIDENT; DR. R. C. SMEDLEY BEING RE-ELECTED COUNCILOR FOR THE SECOND DISTRICT."** As a further pointer for the "ORGAN" we will add that the Second District includes the City of Salt Lake. We congratulate the "Official Journal" upon the fact that this was its ONLY attempt to supply items of Utah news, for its miserable failure to give this one item correctly is evidence of what might have happened if it had attempted to serve up additional "official" news. It should secure a new and up to date correspondent or else abandon the farce of calling itself the "official" representative of a live State. As regards the State papers, we have been able to publish the two best papers of the September meeting, Dr. Condon's in November and a very full abstract of Dr. Clark's on the Sterilization of Criminals and Defectives in this issue. Up to the present time the "official" has not had time or perhaps the inclination

not had time or perhaps the inclination, in as much as it states on its title page that it is "devoted to the interests of the medical profession of the Pacific Northwest, to publish either the minutes of the proceedings or any of the papers of the Utah Association, of which it is the "organ." Another year we expect with skilled aid to publish those of the Association papers which may be of value to the profession long before the Seattle organ awakes from its dormant condition following the exertion of publishing the papers of one year within a month or so after the holding of the following annual meeting when they are naturally superceded in interest and usefulness by the new papers. Possibly the editor of the "OFFICIAL JOURNAL" of the Utah Association is suffering from a Northwest chill and like his neighbor the Alaskan bear has gone into winter quarters to hibernate and suck his paws for sustenance.

REPORT OF OCTOBER EXAMINATION FOR LICENSES TO PRACTICE MEDICINE IN UTAH

All applicants for license to practice medicine in Utah, five in number, passed the examination, there being no applicants by reciprocity.

Oscar Roi Hardy, of Salt Lake City, High School and Northwestern University, 1912; David W. Henderson, of Clarkston, Utah, High School and "Jeff," 1912; Clarence J. Neilsen, of Mount Pleasant, Utah, High School and "Jeff," 1912; Cristos T. Petrulas, of Athens, Greece, "National University, Athens, Greece," 1899; Lyman H. Robinson, of Filmore, Utah, High School and "Rush," 1912.

MEDICINE, HEALTH AND MATRIMONY.

There has been some very just agitation of late in regard to health certificates for marriage. Bills have been

introduced in various state legislatures, making it necessary for both contracting parties to obtain clean bills of health from reputable physicians before they can be married by a clergyman or other official. The most of these bills have never even been reported out of committee, and in practically every case they have failed of passage. It is a well recognized fact that the time has come to conserve the health of our citizens. We talk of conservation of natural resources, etc., but little of the conservation of our own health by the adoption of proper modes of living and sanitation. Again, what protective measures are we adopting for our offspring, the future generations of this land? What are we doing to prevent the development of defective children? The term defective may be used in a broad sense; defective perhaps only to a slight degree in body and mind, but who on account of these inherited conditions are to say the least deficient in their earning capacity and their ability to make sturdy, progressive, law abiding citizens. It is also a great economic loss to the state not to have productive citizens of a high order. Again, it should not be forgotten that a large per cent. of our defectives become state charges of one kind or another in penal and charitable institutions.

It is a well established scientific fact that individuals suffering from syphilis, gonorrhea, tuberculosis, or any other infectious or constitutional disorders should not be allowed to marry, yet such marriages are consummated daily. It is time that society begin to protect itself. We are quite willing to appropriate money for the prevention of diseases of animals and to pass quite stringent laws on this subject. In certain states there are stallion license laws which **prevent defective animals** being used for service. Such a condition is unique in the light of our famed modern day intelligence.

It is extremely difficult to secure the

passage of a health law of this kind. There seems to be an inherent resentment among our legislators against passing any legislation of this kind which will have as its end the betterment of the human race. Why, no one knows, only that public sentiment has not reached this high point. It is possible that a law requiring health certificates before marriage would be difficult of enforcement. Undoubtedly many dishonest physicians for a paltry sum would issue certificates of health just the same as now they write prescriptions for liquor in dry territory. Again, a smaller per cent. of dishonest clergymen and officials who are allowed to marry will be found who will perform the ceremony when health certificates have not been obtained or with the knowledge of fraudulent certificates. Nevertheless, much good would be accomplished, as without doubt the majority of our people are honest, although at times it would seem that the converse was true.

In the absence of laws the clergy can do much, if they will, of a constructive character along this line. It has been reported that one eminent Chicago clergyman, the Rev. Dean Walter T. Sumner, President of the Chicago Vice Commission and member of the Board of Education of Chicago, has stated that hereafter he will perform no marriage ceremony without the contracting parties present clean bills of health. This gentleman, who probably knows more than any other person about the vice conditions of that great city and their results, comes to this wise decision after careful study. It would be well for others in the ministry to do likewise and consequently do their share in the furthering of the campaign for the betterment of public health. Some shortsighted clergymen have objected on the ground that it would "rob the holy marriage rite of its sanctity and divest a sacred custom of its beauty and holiness," etc. To attempt to answer such

arguments would scarcely be worth while when known facts are at hand. The matter is one for cold, hard, scientific consideration. Again let us emphasize the absolute necessity of conserving our national efficiency along all lines.—Monthly Bulletin, Ohio State Board of Health.

STERILIZATION OF CRIMINALS AND DEFECTIVES—WHAT OTHER STATES ARE DOING.

In view of the appalling facts of the transmission of crime, epilepsy and feeble-mindedness, from generation to generation, the New Jersey legislature, at the session of 1910-1911, passed a bill which empowered the governor to appoint a commission to act in all cases recommended by the heads of the various institutions; the persons having the right of appeal to the court to show why the operation should not be performed. The law permits and specifies the operation—orchidectomy in rapists, and vasectomy in all other defectives. In the Indiana State Reformatory vasectomy has been performed in several hundred cases, and while it prevents procreation it does not destroy sexual desire or the ability for coition. The sterilization of defectives and delinquents is one of the newer questions coming before the profession and it deserves careful study and earnest consideration.—New York Medical Journal.

Governor Dix Signs the New York Sterilization Bill.—The bill providing for the sterilization of criminals and defectives, which was introduced by Dr. R. P. Bush, from Chemung county, and which was passed by both houses, was signed by Governor Dix. This law has been urged in order to reduce the number of children with inherited tendencies toward insanity and crime. New York is the sixth State in the Union to adopt this law. The section appears

under the Public Service Law, and is entitled, Operations for the Prevention of Procreation. The governor is empowered to appoint one surgeon, one neurologist and one practitioner of medicine, each with at least ten years' experience, to be known as the Board of Examiners for Feeble-Minded, Criminals and other Defectives.—Medical Fortnightly.

The Convention of North Dakota Homeopathic physicians urged that the legislature pass a law compelling the asexualizing of all men who were found to be insane or whose criminal record stamps them as habitual criminals and as likely to be unfit for parent-hood.

WOMEN VOTERS OF UTAH TO THE FRONT.

The Utah Federation of Women's Clubs submitted a list of seven questions pertaining to legislation desired by the women of the state to the candidates on the various tickets for governor and for the legislature from Salt Lake County. Fifty-five letters were sent out asking each candidate to place himself on record as to his attitude toward the desired legislation. Thirty-nine replies were received, all of which were favorable. Among the sixteen who did not reply or express any opinion in regard to the questions submitted was the Roosevelt nominee for governor. The Republican and Democratic nominees both pledged their support and were recognized by the Federation.

The following are the questions submitted.

(1) Are you in favor of and will you support legislation—social and industrial—looking to the protection of women, children and the home?

(2) Are you in favor of a minimum wage scale for both men and women, and will you support such a bill?

(3) Are you in favor of a workmen's compensation and employers' liability

act, in the interests of men and women workers?

(4) Are you in favor of the present nine-hour law for women; also a better child labor law?

(5) Are you in favor of and will you support an amendment to the present marriage law which will require a certificate of health from a reputable physician showing applicant to be free from transmissible or communicable diseases?

(6) Are you in favor of strengthening the present venereal disease law?

(7) Are you in favor of, and will you support the appointment of women on all state and local boards, industrial, educational, charitable and reformatory?

Referring to the thirty-nine who replied favoring legislation, the committee stated: "We have pledges of support from candidates over their own signatures and we will show those who are successful that they cannot play football with us at this next session of the legislature like they did at the last."

Replying to a letter enclosing copies of the four resolutions adopted by the State Medical Association, Mrs. A. J. Gorham, president of the Federation, stated: "The same subjects had been presented to the Federation by our own legislative committee and had been adopted by an unanimous vote. Any assistance which can be given in the legislature by our committee will be cheerfully forthcoming. The women of our organizations are interested heart and soul in these preventive measures and will do all in their power to help."

WHO'S WHO IN THE UTAH SENATE AND HOUSE.

Below will be found the names of the next state senate and house of representatives. These men and women are now in a fit state of mind to be

approached and have instilled into them some of the fundamental principles of social and domestic hygiene. In a few weeks they will become non-receptive of new ideas. They will be overloaded with suggestions and overpowered by brain fog. Now is the ideal moment for physicians and educators to get in their work. Do not wait till Christmas. Presents and the approaching absence from home during the first two months of the new year will engross so much of their time and thought that anything said about a certificate of health before marriage will fall flat. The legislator will have his mind preoccupied with, to him, more important matters. We earnestly ask our readers who have become impressed with the necessity for physical race improvement and better conditions, both socially and morally, to interview their representatives and urge the necessity for legislation such as suggested by the four resolutions of our State Medical Association as published in our last issue. Now is the time to secure their promise of active co-operation in the work. Brothers, get your patients so interested that they, too, will get after their friends in the legislature. Finally, keep in touch with legislative doings and keep writing to your representatives from time to time, reminding them of their promise to support legislation advocated and supported by the medical profession. Let us act so that in the words of the Federation of Women's Clubs our representatives may understand that "they cannot play football with us at this next session of the legislature."

The personnel of the senate will be sixteen Republicans and two Democrats, as follows:

First District—W. S. Hansen (R).

Second District—James W. Funk (D—holdover).

Third District—John W. Thornley (R).

Fourth District—William Craig (R); George J. Kelly (R—holdover).

Fifth District—L. B. Wight (R).

Sixth District—Benner X. Smith (R—holdover); D. O. Rideout (R); W. Mont Ferry (R); Charles Cottrell Jr. (R).

Seventh District—Henry Gardner (R—holdover); William N. Williams (R—holdover); D. O. Rideout (R); W. Mont Ferry (R); Charles Cottrell Jr. (R).

Eighth District—J. R. Edgehill (R).

Ninth District—L. M. Olson (D—holdover).

Tenth District—Joseph Eckersley (R).

Eleventh District—Henry W. Lunt (R—holdover).

Twelfth District—G. A. Iverson (R—holdover).

Twenty-five Republicans and sixteen Democrats will constitute the house of representatives, as follows:

House of Representatives.

Box Elder—M. H. Welling (D).

Tooele—Alma Swenson (R).

Cache—S. P. Oldham, B. Y. Benson, J. E. Cardon (D).

Rich—J. F. Spencer (R).

Morgan—H. B. Crouch (R).

Davis—C. R. Mabey (R).

Weber—W. H. Marriott, J. D. Hooper, J. J. Barker, J. W. Wilcox (R).

Summit—F. W. Marchant (R).

Wasatch—W. L. Van Wagoner (R).

Salt Lake—Jane Skolfield, Anna H. King, Annie Wells Cannon, Edyth E. Read, Clarence Bamberger, M. H. Kriebel, R. L. Judd, Daniel McRae, D. J. Cooke, C. T. Barnes (R).

Utah—W. L. Openshaw, E. Southwick, M. T. Reynolds, J. A. Loveless (D).

Juab—George Jones (R).

Millard—A. A. Kimball (D).

Sanpete—L. R. Anderson (R); James Monson (R).

Sevier—H. C. Christensen (R).

Wayne—Ephraim Dastrup (R).

Piute—S. L. Page (D).

Garfield—J. N. Henrie (R).

Beaver—A. M. Durham (D).

Iron—Wilford Day (R).

Washington—D. H. Morris (D).

Kane—C. J. Smith (R).

Emery—L. P. Oveson (D).

Carbon—L. N. Harmon (D).

Grand—F. B. Hammond (D).

Uintah—Enos Bennion (R).

San Juan—G. A. Adams (D).

A BOUQUET.

A well known physician standing high in professional rank in Salt Lake City writes to the editor as follows:

"I want to commend your editorial entitled 'The Medical Index Expurgatorius and Independent Journalism'—The action of the Council in giving the Utah Association papers to 'Northwest Medicine,' is not only a piece of folly, but one of ingratitude. It is a shame that those of us who may be prevented from attending the state meetings are deprived of the benefits that might come to us from, at least, reading the papers presented there from our leading physicians and surgeons. I am inclined to think that about the only Utah physicians who read the Northwestern are those whose papers are published therein, and a few others to whom it is sent complimentary. We all know that the great body of Utah physicians take and read the Denver Medical Times and Utah Medical Journal, and a good journal it is too."

This is only one of the many letters which come to our table approving the course we have taken in regard to the A. M. A.'s Laboratory, but incompletely tested list of so-called authorized drugs and medical remedies, which the devotee of medical "standpatism" insists shall be the standard for all physicians. Such arguments as those used by the state secretary reminds one of the doctrines of trade unionism and of dynamite for those who disagree.

DEPARTMENT OF EUGENICS

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G. HENRI BOGART, M.D., Paris, Ill.

"Marriages are not made in Heaven!" It is not the purpose of eugenics to affect the sacred ordinances of the churches. "Society, however, having become greatly artificial and not true to the type, agencies have developed which threaten to subvert the very purposes of the union. It is to checkmate their influences that eugenics stands for today. The greatest sin against nature is to bring into the world a child mentally or physically unsound, and the greatest sin against society is to defile the marriage bed with foul disease. What is meant by restrictive laws, is to regulate the issuing of marriage licenses, that the innocent would be afforded protection and guaranteed his or her inalienable right to success and happiness."—Extract, Texas Med. Jour. Nov., 1912.

REPRODUCTION AND MATERNITY.

New York Medical Journal, June, 1912.

Elizabeth B. Thelberg thinks that the curriculum in colleges for women should contain instruction which shall fit them to be mothers, and that without it they cannot be regarded as educated women. If not taught these matters right, adolescence will teach them wrong, and with a veil of sentimentality and false emotion which will hinder clearness of vision. They can best be taught by the physician who is in charge of the health of the college community. The writer, in teaching physiology to the young ladies at Vassar College, begins with the lowest forms of life and shows the progress of evolution in animal life. She shows the development of the reproductive organs in the female, and of the ovum by suitable models and by microscopic study. She also gives a course in public hygiene which embraces the communicable diseases, including gonorrhea and syphilis, and informs her students that a licentious man usually has an infected body and that the infection may be transmitted not only to innocent wife but to children. She also

lectures on constipation and menstruation.

At the close of the senior year she gives four lectures on reproduction, maternity and the care and feeding of children. They are also told about criminal abortion and abortion which is justifiable, also about heredity and eugenics.

Furthermore, models of the uterus and its appendages are shown, also the development of the uterus during pregnancy, and the various incidents connected with pregnancy and parturition are narrated. She admits that the subject is a difficult one to treat, but is impressed with its importance, and feels that an exact and wide knowledge of the subject is the first essential in teaching it. It is interesting to note the manner in which this important subject is treated in the pioneer American college for women. It is also interesting to note that Matthew Vassar, the founder of the college, in arranging for the original appointments for the faculty, stipulated that the resident physician should be a woman and that she should also be professor of physiology and hygiene.

A PLEA FOR STERILIZATION OF CRIMINALS, EPILEPTICS, IMBECILES AND INSANE.*

BY CLARENCE M. CLARK, M.D.

Cedar City, Utah.

This paper is commended to all who are interested in the very important subject covered by its title. The Utah legislature will meet in January, when a bill will be presented legalizing the sterilization of criminals and defectives. Inasmuch as the papers read at the 1911 meeting of the State Medical Association were still meandering through their Seattle official organ during the following September, the month in which the 1912 meeting of the association was held in Ogden, it is possible, in fact probable, that this important paper will not appear until after the adjournment of the legislature, when its effective usefulness will be nil. We are able to give our readers a very full abstract of the paper which will prove not only of interest to them, but will be of service to those presenting the bill as also to our legislature when discussing it.—Editor.

One of the most urgent problems of this age concerns itself with the treatment of defectives. The defectives recruited from the ranks of the imbeciles, the epileptic, the criminal and the insane, clog the wheels of human progress and by their very existence cause the greater part of human wretchedness and misery.

The fact which appals one is that the great stream of degeneracy, instead of being lessened, is constantly on the increase. I quote the following statistics from Vol. 1, International Clinics:

"Our census report shows us that we have had an increase of prisoners from 29 per 100,000 in 1850 to 125 per 100,000 in 1904. The number of murders and homicides has trebled in the last 15 years. The averages for the five years from 1888 to 1893 inclusive, and 1902 to 1906 inclusive, being 38½ and 110 per million respectively. In the census of 1880 we had a total of 91,959 insane, the rates being 183 per 100,000. In 1903 we had 180,000 insane or 225 per 100,000. At the present time in the United States it is estimated that in our 42 institutions for feeble-minded, 115 schools and homes for the deaf and blind, 350 hospitals for the insane, 1,200 refuge homes, 1,300 prisons, 2,500 almshouses, and 1,500 hospitals. There are 300,000 insane and feeble-minded, 100,000 deaf and dumb, 100,000 criminals, with no one knows how many thousands of criminals not in prison, 23,000 private delinquents in institutions, 100,000 paupers in almshouses, and out of whom two-thirds have children who are also mentally and physically defective, and 2,000,000 annually cared for by hospitals, dispensaries and homes. The fact that these form 3 to 4 per cent of our population, or, to put it broadly, that one person in every thirty is defective, dependent or delinquent—with the knowledge that the number of degenerates and defectives is actually upon the increase—puts before the medical profession two problems. First we must ascer-

tain the cause which induces the highly prevalent stream of degeneracy; then, having found the cause, we must go at once to the root of the matter and apply vigorous and effective means for the remedy of the evil.

The great class of defectives, with their accompanying burdens of poverty, disease and crime, are traceable, I believe, to one fundamental cause—depraved heredity. How true this is in the case of the imbecile. He comes into the world imperfect both in body and mind, is characterized by weakness of intellect; he is filled with morbid impulses and desires, and is almost wholly lacking in self-control. All the physical stigmata of degeneracy are found among imbeciles. Many of them are epileptics, besides being defective in the senses of sight, hearing and touch. Many of them are short-lived, but of those who reach maturity the greater majority become public burdens—usually after they have married an equal or inferior in intellect and have brought into the world children more degenerate than themselves. In fact, the most appalling feature of the imbecile is his marked tendency toward reproduction. This tendency is especially strong in the female. She, being too deficient in intellect to protect herself, becomes the mother of many illegitimate children. The infirmaries are invariably crowded with imbecile mothers and their illegitimate, degenerate offspring. True it is that marriage of the mentally defective has been forbidden in Minnesota, Delaware, Connecticut, Utah, Indiana, New Jersey and North Dakota, but unfortunately marriage is not necessary to propagation. These imbeciles continue to propagate their noxious kind, with the stigma of illegitimacy added to that of degeneracy.

Now, to turn to the second class of defectives—the epileptics—of which there are 135,000 in the United States at the present time, most of whom are in a more

*Read before the State Medical Association, Ogden, Utah, September 24, 1912.

or less helpless condition. In the causation of epilepsy heredity plays an exceedingly important part, for any pronounced manifestation of degeneracy in one generation may be the harbinger of epilepsy in the next. The tendency toward disease transmitted by the epileptic parent is exceedingly strong. Often this tendency manifests itself in the progeny as epilepsy, but frequently in such equivalent form as insanity, idiocy, chorea, hysteria, or an uncontrollable desire for drink. Echeverria, after ten years' careful research into the character of the offspring of epileptics, has published the following statistics bearing upon the question. Excluding all cases not fully verifiable, he found that 62 male and 74 female epileptics produced 553 children. Of these latter 22 were still-born, 195 died during infancy from spasms, 78 lived as epileptics, 45 were hysterical, 6 had chorea, 11 were insane, 7 had strabismus, 27 died young from other causes than nervous disease. Thus, out of 553 children, 448 died early or were gravely afflicted, which leaves only 105, or less than a fourth of the whole number, healthy.

Concerning the causation of crime, McKim says in his book, "Heredity and Human Progress": "The tendency to crime is essentially inborn. As a rule, criminals are physically defective, presenting a varying number of the physical stigmata of degeneracy." A prison physician says he is convinced that among the many causes which produce a criminal life the physical inferiority of the offender is one of the most important. In fact, the criminal population lie on the borderland of lunacy. Their abnormalities constitute evidence of degeneracy or insanity. Most criminals have a defective brain condition which is incurable and even unsusceptible of amelioration, and for them we cannot reasonably cherish a hope of reform. Disease and degeneracy are dependent upon heredity—so, too, is the tendency to crime—superinduced by these two factors, disease and degeneracy. Most of our criminals are born into crime as well as reared, matured and instructed in it, and habit becomes a second nature superinduced by their original moral depravity. Insanity, merely a grave manifestation of degeneracy, lies at the root of an immense number of crimes, and even the layman knows that the vast majority of cases of insanity are dependent upon an inherited taint. "Then of all hereditary taints," says Dr. E. Laurent, "alcoholism is undeniably the most frequent and among criminals it is found almost always, alone or in conjunction with other taints. It is the most common cause of degeneration, and our prisons are peopled mostly with degenerates or children of drunkards." "But," asks the philanthropist, "cannot the criminal and the drunkard be reformed, and the insane person be cured?" Unfortunately, no. They practically all have inherited defects which we

can never remove and which they will, if unhindered, pass on to their progeny in a more aggravated form. Besides, investigation shows that of the freed criminals 79 per cent return to a life of crime, many of them being undetected and all of them possessing the power to hand on to posterity their deplorable weaknesses. There is certainly an unanimity of opinion on this view of heredity, that any enfeeblement or a parent tends to reappear as enfeeblement of the issue. Dugdale attests even to the relation of heredity to illegitimacy. He says: "Harlotry may become a hereditary characteristic and be perpetuated without any favoring environment to call it into activity." We are convinced, then that the vast number of our defectives are born so, and that while environment and training may ameliorate the condition of their degeneracy, nothing can ever completely remove the degenerate taint with which they are born. Now it is acknowledged to be a general biological law that the lower the position of an animal in the scale of being, the greater its capacity for reproduction of its kind. This is true generally in the case of man, and goes far to explain the exceeding slowness of human progress. Not only are men of a superior type much more rare than those of the inferior, but the latter are much more prolific.

Our defectives—the progeny of degenerates—absorb the nation's capital and render the rapid progress of the race impossible. We agree now that humanity is heavily burdened with idiots, imbeciles, moral imbeciles, hysterical and epileptic criminals and criminals who are incurably insane. And I think you will also agree that the burdens of poverty, disease and crime are traceable to one fundamental cause—depraved heredity. Knowing the cause, we can remedy this great evil only by ceasing to breed strains which are weak and vicious. Herbert Spencer says: "There is no greater curse to posterity than that of bequeathing them an increasing population of imbeciles, idlers and criminals. To aid the bad in multiplying is in effect the same as maliciously providing for our descendants a larger host of enemies.

But how shall we hinder the defectives from multiplying? To prohibit their marriage is useless—they will propagate their kind illegitimately. To isolate them would also be impracticable because of the enormous expenditure involved in maintaining them in isolation.

McKim offers this remedy—that our defectives be put to death in a gentle, painless manner. But there are a score of serious objections to be raised against this plan. It would lessen the sanctity of life, violate man's natural right to live, brutalize the general conscience, and encourage murder by giving too much power to officials who might take unprincipled advantages of the opportunities to wreak personal vengeance. So with the plans of prohibit-

ing marriage and isolation—McKim's plan of putting to death all defectives is equally impracticable. But there is a fourth remedy, more effective than any of these, more simple and more humane. It is the proposed remedy of sterilizing all defectives so that reproduction will be impossible. Besides effectively hindering the defective from propagating his kind it would also relieve the state of its great burden of expense, because for many of our present defectives isolation would be no longer necessary. Half the inmates of the asylums for the insane might be released, and could take a share in the world's activities, could become independent as servants, domestics, etc. They would be rendered harmless by sterilization, since their insanity is undoubtedly superinduced by excessive violation of sexual passion. So, too, an enormous number of criminals would be cured of their vicious tendencies by this operation, and so be rendered safe and serviceable members of society.

Now, this plan would not interfere with the general productiveness of our kind. What it would do would be to insure each child of being "well born," because only the mentally and physically fit would be allowed to perpetuate their kind. All others would be sterilized.

The roll call, then, of all those with whom our remedy would deal consists of the following classes of individuals coming under absolute control of the state: Idiots, imbeciles, epileptics, habitual drunkards, all insane criminals and other criminals who might be adjudged incorrigible. Each individual of these classes would undergo thorough examination, and only by due process of law would he be subject to the operation.

Now, the operations necessary for sterilization are, as you all know, very simple and attended with little or no danger to the patient.

Dr. C. H. Sharp of Indianapolis is the originator of the operation of vasectomy. He says: "Since October, 1899, I have been performing an operation known as vasectomy, which consists of ligating and resecting a small portion of the vas deferens. This operation is very easy to perform. It requires about three minutes' time. The subject returns to his work immediately, suffering no inconvenience, and is in no way handicapped in his pursuit of life, liberty and happiness, but is effectually sterilized. I have been doing this operation for over nine years. I have 45 cases that have afforded splendid opportunity for post operative observation, and I have never seen any unfavorable symptoms."

The operation for sterilizing the female is slightly more complicated than that for the male, but it is attendant with no more danger. Three operations of this sort I have performed myself. In one case I did a complete pan hysterectomy, while in the other two I did an ovariectomy and an am-

putation of the clitoris. Now, I am fully convinced of the advisability of performing these operations on defectives. The two latter operations I mention were performed upon imbecile women who were inmates of the Utah County infirmary. Both of these women were the mothers of illegitimate children. They had succeeded in criminally involving boys of 16 or 17 years of age. They were actually guilty of masturbation, and during the menstrual period were almost driven insane by overwhelming sexual passion. They were constantly becoming worse, and we feared that they must be committed to the mental hospital. However, the slight operation of sterilization was performed, and it completely changed their nature. They lost their vicious tendencies, became of a sunnier disposition, a brighter intellect and are now supporting themselves by working as domestics.]

The operation of pan-hysterectomy was performed upon an epileptic. She was a married woman, the mother of four bright, healthy children, when she began to take epileptic seizures. The attacks occurred at first only during her menstrual period. Gradually the length of the period of epileptic attacks extended itself over practically the whole month. The husband feared insanity. The surgeon advised sterilization, providing the woman and her people gave consent. The operation was performed for the removal of both the ovaries and the uterus. The woman completely regained her health and is now entirely free from epilepsy.

Let us now consider a number of points in favor of sterilization:

In the first place, it absolutely stops procreation; and, second, the operation is attendant with practically no danger. Moreover, this method of preventing procreation is immensely superior to all others proposed in this point—that it is endorsed by the persons subjected to it. All other methods place restrictions and therefore punishment on the subject; this treatment absolutely does not.

We have in sterilization a feasible, painless, satisfactory remedy, and it is up to the physician to use this remedy in ridding the world of its criminals, defectives and degenerates. Four or more states have already appointed committees to examine defectives and have given to surgeons the power to perform this operation. Let us agitate the matter and see to it that Utah is in the front ranks in this vital matter of race improvement.

PERSONAL.

Dr. William L. Rich has moved from Brigham City, Utah, to Paris, Idaho, where he has entered into partnership with Dr. J. W. Hayward. Our Journal follows the Doctor to his new home.

Nevada Medicine

Address all articles, personals, items of interest, and books for review, intended for Nevada Medicine, to the Editor, Geo. L. Servoss, M.D., Gardnerville, Nevada.

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Editor

GEORGE L. SERVROSS, M.D., Gardnerville, Nevada.

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SALUTATORY.

NEVADA MEDICINE makes its formal bow to the profession of Nevada. As its name implies, this section of the Journal will be devoted to matters pertaining to Nevada, and Nevada alone. Owing to the small numbers of doctors within the State it is out of the question to maintain a purely Nevada Medical Journal, as it would not be self sustaining. The offer of the publishers to give us this Nevada Section solves the question, and without obligation upon the part of the Nevada doctors, other than that they give this Journal their support in every possible way. The Journal, as it has been published, has contained the Colorado and Utah Sections. While these two sections have given a great deal of attention to State matters, they have enlisted the assistance of men outside these States and have thus made this Journal a National, as well as a State affair. Such action gives the Nevada profession, from the beginning, a Journal which will bring Nevada before the eyes of the profession throughout the country, and should act to increase an interest in the doctors of the "Battle Born State."

THE NEVADA DOCTORS.

If numbers governed, the Nevada medical profession would occupy but a small place in the minds of the people. However, numbers do not govern in this state. Even in our furthestmost mining camps we find men of more than passing ability. Such men are thrown very largely upon their own resources, and are obliged to meet obstacles as they arise, and in a lonesome way. They are too far away from their brothers to call for consultations, and they carry many very difficult cases through to satisfactory termination—cases which, as a rule, would receive the attention of one or more consultants under ordinary circumstances. Although but little is heard of these men, we know they are doing good work.

In our larger towns and cities we find men who will rank well with those of the metropolitan centers of both the East and West. In Reno there are surgeons who, although they say but little about themselves, are achieving successes which rank with those reported from Chicago, New York, Rochester, Minn., or the cities of the coast. It was formerly the habit of the people of Nevada to take their surgical cases to the coast cities, but today we find them journeying no farther than Reno. In this little city we find two hospitals which are full and overflowing at all times, and in which patients receive the same attention as would be given them in the larger cities.

Like the surgeons, the internists of Nevada are down-to-date in their practice. The pathologist is called upon frequently for his opinions, and every minute detail is as well considered by the Nevada doctor as by the man of New York City, prior to the determination of diagnoses or institution of treatment. Not only is this true in the larger towns of the state, but likewise in the smallest settlement—the frontier, if you please. There is hardly a

single doctor within the state who takes things for granted. Like the Missourian, he has "to be shown."

Having had no journal of their own, the Nevada doctors have not given reports of many of their findings to the medical world at large, but this does not signify that they have not been doing good work. With the institution of **Nevada Medicine** it is very probable that our men will be heard from to a greater extent, and the fact that Nevada is not out of the world will be clearly and forcibly demonstrated.

THE HYPODERMIC.

The history of the hypodermic syringe and hypodermic method of drug application reaches back over but a short space of time, comparatively speaking. Primarily, this instrument was employed principally in the application of those drugs which tend to obtund the senses, and in such instances as the prompt drug action was desirable. For the general application of drugs or other curative agents the syringe was not called into play.

This condition continued until less than two decades ago, or at the time of the introduction of anti-toxic serums, and agents of like nature. With the recognition of the fact that agents other than the opiates and a few stimulants employed for immediate and transitory effect might be employed in this manner, the list of remedies for hypodermic employment received constant additions.

Recognizing that the hypodermic might be called into play with considerable frequency, a greater study was made of its possibilities. The question of drugs to be employed in this manner received greater attention, and special forms of such drugs were evolved. Such a revolution followed until today, when we find, in many instances, that treatment of disease is

carried on almost wholly by this method of drug application.

Primarily, when hypodermic medication was in its infancy, there was much fault to be found with the method. Many of the accidents incident to surgical procedure were associated with the technique of hypodermic operations. Following the needle puncture there might be inflammation, and in numerous instances abscess. This all occurred prior to the discovery and establishment of the germ theory. Since such establishment, however, fewer complications of this nature have been noted. Not only were the syringe and needle dirty, but the agents employed were given no attention as to their sterility, insofar as infective agents might be concerned. Those using the hypodermic carried it about them, illy protected, as a rule. The drugs employed, consisting mainly of morphine, strychnine and apomorphine, accompanied the syringe and in the shape of small tablets. Extemporaneous solutions of the tablets were made, frequently in water which had not been sterilized in the least. It is little wonder that such conditions favored inflammation and abscess formation. The greater wonder is that there were not more such sequella.

With the advent of the germ theory and the establishment of antiseptics and asepsis the popularity of hypodermic medication increased. It was found that if the site of puncture were treated in such a manner as to render it surgically clean, and if the syringe and agent employed were likewise clean, but few, if any, bad results followed. Not only did such improvements of technique take place, but the instrument employed has undergone numerous changes, all of which tend toward cleanliness. Primarily, the hypodermic consisted of a little pump with leather plungers, which latter were uncleanly to say the least. They could, of course, be sterilized, but at

a considerable expense of time and trouble. Not only were they uncleanly but through atmospheric action and consequent drying out of the leather it not infrequently happened that the syringe was out of commission just when needed the most. Later an all-metal syringe was adopted, one in which the plunger was accurately fitted to the barrel by grinding. This instrument immediately became, and still remains, popular. It has the advantage that it never dries out and that it may be rendered aseptic through boiling or the use of certain non-corrosive antiseptics. It has, however, the disadvantage that it cannot be employed in the administration of corrosive substances, and that such substance cannot be used in making it aseptic. Later on glass syringes were substituted for the all-metal. Some of these, like those made wholly of metal, were furnished with glass plungers accurately ground to fit the barrel, while others were offered with asbestos or other textile plungers. The all-glass instrument is undoubtedly the best on the market today. It is advantageous in that it may be thoroughly cleaned by boiling or by the use of any of the chemical antiseptics. The only possible objection to it is that it must be thoroughly cleaned after use, as the retention of any fluid containing a drug liable to crystallization is liable to clog the syringe and cause adherence to the plunger to the barrel. This, however, is but a minor objection, and as every instrument should be thoroughly cleansed after use, this objection is negligible.

The care of the needle has been a bugbear to the profession at all times. When watery solutions are employed, unless the needle is rendered perfectly dry the lumen is liable of closure through rust accumulation. To overcome such closure wire stylets have been employed to keep the lumen open. They have their advantages and dis-

advantages. It is to be admitted that they do keep the lumen open, but they do, at the same time, favor uncleanness in those who have a tendency to be careless. If, after use, hot water, followed by alcohol, is drawn through the needle, the stylet will be found unnecessary, as the lumen will never show a tendency to closure through oxidation. Such procedure likewise tends to render the needle sterile. Prior to use the needle should be immersed wholly in a 75 per cent solution of alcohol and should be plunged into tincture of iodine, prior to the making of the puncture. If the syringe and needle are treated in such a manner prior to use, there is but little, if any, danger of the carrying of infection by this instrument.

The skin at the scene of puncture should be rendered aseptic. There are numerous ideas as to how this should be done, but today the general consensus of opinion seems to be directed to the painting of the surface with tincture of iodine, and the results seem to bear out the idea of efficacy. When iodine is not at hand the skin may be washed and rinsed with alcohol, and with good results in the main. As the resulting wound from the needle stab is, as a rule, very small, and is seemingly sealed by nature, it requires no attention. When a large needle is employed, as in the administration of salvarsan, the punctures may be sealed by a drop of collodion.

A very ingenious hypodermic unit has recently been added to our instruments of this sort. It consists of a block tin tube, carrying the remedy to be employed. To the tube is attached a needle, which, in turn, is protected by a glass cap. When the instrument is to be employed the cap is removed, the tube pressed until the fluid appears at the tip of the needle. The needle is then introduced through the skin, the tube pressed until the fluid is thrown into the tissues, then

withdrawn and the unit thrown away. As the needle is aseptic, and as the instrument is employed but once and then destroyed, the advantages are obvious, the only possible objection being the increased cost of each individual dose.

The adoption of hypodermic medication in preference to oral administration of drugs offers many advantages. By this method the doctor is absolutely sure that the drug is being taken up by the system. This is far from true when drugs are given by the mouth. The dose is relatively smaller and the activity greater. Many drugs which may interfere with normal functions when given by the mouth present no such interference when administered hypodermically. Iron may be given over any length of time without constipation occurring, as is invariably the case when administered orally. The effects of this drug are likewise more readily apparent when administered subdermally. This is likewise true of numerous other drugs. In fact, the introduction of the hypodermic has opened a new highway for drug application—one of practically absolute surety.

Had it not been for the discovery and invention of the hypodermic method it is very possible that biochemic substances would not as yet have been discovered and employed. We would still be treating diphtheria by the older methods instead of by antitoxin. The vaccine immunization against typhoid fever would not be known. Salvarsan would not have been worked out. In fact, many of our more important remedies of today would not be in existence. It has been the possibilities of this little instrument that have given an impetus to the investigators.

Today, instead of employing the tablets and making extemporaneous solutions at the bedside of our patient, we are offered aseptic and ready-prepared solutions, these coming to us in hermet-

ically sealed containers. With these and a clean syringe, needle and field of operation, all of the older disadvantages of this method of medication have been overcome. Not only are the drug agents offered to us in this form, but the biologic remedies are packed either in ampules or in aseptic syringes, so that there is practically no excuse for any other than a good result following the use of the hypodermic in the application of drugs, serums, bacterins or vaccines.

Hypodermic medication is undoubtedly only in its infancy. As this method is given more and more study, it is very probable that it will be em-

ployed practically to the exclusion of all others. It has many advantages and but few disadvantages, the latter being so few as to be negligible. It gives assurance of the total dosage being wholly introduced into the system, consequently giving a better idea of the amount of drug to be employed. It overcomes idiosyncrasy in numerous instances. It is not followed by bad general results, or local results for that matter, as are many drugs administered orally. In fact, the advantages over oral administration of drugs are too numerous to admit of enumeration within the short space afforded this paper.

THE MOTIVE POWER OF MODERN PROGRESS*

J. O. COBB, M.D.

Chicago, Illinois.

Surgeon, United States Public Health and Marine-Hospital Service.

The first principle of one's life should be the preservation of one's health. The happy community is the healthy community; the happy family is the healthy family. One cannot be unhappy if he is healthy even if he be poor—I had almost said even if he be hungry. The ultimate stability of a nation depends upon the health of its people—primarily upon the health of the family unit. For the health of my family is of vital importance to my neighbor, as is the health of my neighbor's family of vital importance to me or mine. What affects his health and welfare affects mine in some manner, however remote it may seem. If his family is stricken by disease, all of his neighbors will probably suffer in some way, directly or indirectly.

And thus a serious epidemic may originate from one case of sickness and spread out into the community, out to the village, out to the country and adjoining towns—and on, and on, unchecked, unless by a combination of community interests the whole people unite to prevent the further spread of the disease.

And it is just at this point where intel-

ligent people come face to face with preventive medicine. The educational standard of a community can be gauged with unerring accuracy by the number of men and women who are found working with the physician to prevent the spread of disease. Therefore without the help of the whole people, united in an intelligent campaign, preventive medicine must be a failure. The most fascinating subject in medicine today is the study of preventing the spread of disease; and we have come to understand that the mission of medical men is not merely to cure disease, but to prevent it. So this wonderful new science of the prevention of disease has fastened upon the mind of humanity as it has never done before, and today all enlightened nations are united in the altruistic enterprise, not only to check all diseases, but to wipe out entirely certain of the contagious diseases that have, at times, nearly depopulated the world.

To bring the subject forcibly to your attention, let me recall that from the first recorded outbreak of plague in Athens, 430 years before Christ, down to a hundred

*Address before the Medical Society of the Missouri Valley at Colfax, Ia. Medical Herald, May, 1912.

years ago, this terrible disease has overrun the world from time to time and turned back the tide of population and reversed the wheels of progress from which the unfortunate nations that had been attacked did not recover for many years. In one great epidemic which devastated Europe, plague ran through every village and hamlet and millions of people died before the disease burnt itself out because of the lack of fuel. Times innumerable smallpox has spread over Europe like the wildest forest fire; and all through the middle ages this loathsome disease was endemic in all the cities of Europe, and it kept down the growth of great cities by its rapid succession of epidemics.

And then besides this check to progress from continuous epidemics of smallpox, and of plague, and of the spreading diseases of childhood, there was another preventable disease that slowly but surely sapped the life of many great cities and of one great nation. A close study of the Roman Empire justifies one in saying that malarial fever had more to do with breaking up the grandest empire of the world than had any other single or combined cause. This insidious disease steadily gnawed at the vitals of all the great cities bordering on the Mediterranean until they fell into a decline from which they are just now beginning to emerge.

In the olden times the people settled into the belief that war and disease were Gods instrumentalities to keep down the population of the world; and in the face of one disaster after another man was but a palsied child in the presence of this awful mystery of the Divine will. Everywhere superstition shrouded his intellect. At every hand the bloody Moloch of epidemic disease stood athwart the path of human progress. We little understand in this day and time how the world was eclipsed by the charlatanism and superstition of the Dark Ages. Aside from music and art there had been no real advancement for the betterment of mankind in all these centuries of the Christian era. The pendulum of panic had swung relentlessly back and forth in its death-dealing destructiveness. Hope was paralyzed. Faith smouldered beneath the ashes of abject misery. Then Jenner discovered vaccination! I place this discovery as the greatest epoch in history, the turning-point for progress and happiness.

It was as if the scales had fallen from the eyes of the world. Medical men took hope. Suddenly and without heralding, medicine became a science, and the physician discovered that he himself, without the intervention of amulets and swinging censers, at last could do something to loosen the hold of this monster that had the entire human race in the grip of its cruel hand. Mysticism gave way to simple facts, and it was then that the medical man drew his head out of the sand-heap of ignorance and superstition and stood up and faced the future with a new courage written in his face.

And Jenner's fight to prove its truth! What a battle between ignorance and science! Jenner and his confreres were only trying to prevent the spread of smallpox, but nevertheless there was just the same senseless cry against preventive medicine then that there is by the fanatic of today, but there is this difference: in those days they were simply ignorant and superstitious, while now most of the people who are fighting preventive medicine are heartless vampires, sucking the lifeblood out of the poor and credulous by means of various cults and patent medicines and poisoned foods. The cry of that crowd is the yelp of the hungry wolf. They can't hoodwink the public much longer. The people are finding them out. Therefore let me urge you to go back to your homes and hand the fight to them every step of the way.

And there is no better weapon to beat these hypocrites than teaching the general public the simple truths about preventing the spread of contagious diseases, for once people know how simple it is the fight is won right there. There is no self-exploitation, or self-seeking, in teaching the public sanitary knowledge. As you are trying to teach them how to escape disease they could not rightfully charge you with seeking to impose unlawful restraints upon their liberty, or accuse you of interfering in any way with their constitutional rights. You can easily gain their confidence by pointing out to them the scientific methods medical men use in preventing the spread of contagious diseases. All over the world, in far-off China and Japan, science-loving men and women sit bent over their microscopes and laboratory benches, plodding for knowledge that will prevent you and me from catching disease. There can be no

harm in that—no monopoly, no interference with "medical freedom."

Then let me suggest another effective way to beat these fakirs. Speak to societies, farmers' clubs, schools and gatherings of laymen, and teach them in simple, plain language the wonders that have been accomplished by preventive medicine. As contagious diseases from within its own precincts to outlying towns and communities, an example, tell them of the ravages of Texas cattle fever up to a few years ago. They will more readily listen to something concerning animals than they will listen to the clearest facts about themselves. It will fix their attention at once to explain to them how Theobald Smith saved cattle raisers millions upon millions of dollars by the simple discovery that the infected tick was the cause of the spread of Texas cattle fever. It will not be hard to interest your farmer friends in this subject. They know how the government is saving their livestock and preventing the spread of disease among animals and plants. Even the city man understands this phase of preventive medicine. It is simple, easy to explain and easy to understand.

And Congress understands every detail of this wonderful subject from that angle. We are all proud of our Agriculture Department. It has a monetary value. Its wonderfully effective administration means millions to farmers and to consumers. There is no money starvation of a single bureau or division under its operation. And just here let me emphasize a trait of human cussedness: the people who fight the prevention of diseases of man never once raise a cry of medical freedom to keep hogs and cows and chickens and plants of all kinds out of the hands of the "doctors' trust." They should at least be consistent.

But don't stop here. Never mind the fakirs. Shake the red flag of challenge in their faces and go right on with your story as it affects man, never for a moment failing to show your pride in the achievements of preventive medicine which stand unmatched by any other science. Make yourselves understood in the simplest language you can command. Suppose you take yellow fever to illustrate your point. This is something recent of which most of them have read. Tell them the story of how Surgeon-General Sternberg sent Reed and Carroll and Lazear down to Cuba to find out

how to prevent the spread of yellow fever—not how to cure it, now mind you, but how to prevent its spread. And while you are telling them this, don't forget, by all means, the sad story of Lazear. Set out before their minds the wonders of the Panama Canal, and how the French, notwithstanding their great resources and engineering skill, failed miserably in their efforts. It will appeal to the imagination of your hearers if you explain to them that the expenditure of American money, with all the brains of the engineering corps of the army back of the enterprise would have been a miserable fiasco, like the failure of the French, but for the self-inflicted experiments of these young army surgeons, Lazear and Carroll. It will be no foolish metaphor to declare that the canal has been dug with the mosquito net; and, if at this point you should wish to take an oratorical flight and picture to them the future monuments and statues of the builders of the canal that are likely to grace its course, I am sure you will have sympathetic hearing if you should declare that the greatest of these monuments should be to the memory of these young heroes, Jesse W. Lazear and James Carroll, one of whom gave up his life in their dual self-imposed experiment for the benefit of human kind. And to prove what? The simplest kind of thing, namely, that a certain kind of mosquito could carry yellow fever from one person to another.

There was no mystery attached to this dread disease after all. One turn of the key of knowledge opened the book at a simple, understandable story. It has the ring of truth and sincerity, and it will cause the most bigoted and narrowly prejudiced person under the sun to pause and think. That one experiment, human sacrifice though it was, has saved twice over to the United States the whole cost of the Spanish war, not to mention or count the saving of hundreds of lives. Without it there would not have been any Panama Canal. The whole world was benefited by what these young men did. There was no doctors' trust in that!

The general public must be reached by simple, plain language, and by understandable demonstrations. What can make a plainer, more convincing story than the spread of plague by the flea; of malarial and yellow fever by the mosquito; typhus

fever by the louse; Rocky Mountain spotted fever by the tick!

It is like a tale from wonderland to explain how modern sanitary knowledge is pushing back the infected jungles of Ceylon and of Africa, and of the Philippines, localities of the world which have hitherto withstood the attack of the white man. Now they are becoming inhabitable because the white man has found out how to protect himself against the bites of disease-carrying insects by the simple precaution of sleeping under a net.

Without the science of preventive medicine there would have been no Cape to Cairo railway. The white man has pushed his way into darkest Africa under the mosquito net rather than at the point of the bayonet.

For four hundred years Spain battled against unseen foes in Cuba, tropical America and the Philippines. Then the great blessing of the Spanish-American war gave preventive medicine a chance to solve the mystery. In ten years what a change! What magician has waved his wand over these former hot-beds of pestilence and freed them from the shackles of yellow fever, from smallpox and from other diseases?

What had held back the progress and population in these countries under Spanish rule all these years? Or, to give the question wider scope, what held back population and the progress of the world through eighteen centuries? Ignorance, mysticism, pestilence.

So, you see, mystery is rapidly giving way to knowledge; knowledge brings simplicity, and with it confidence. Preventive medicine is an open book, written in the language that the most ignorant can understand, if he will. But here is the battleground, for it has always been, that by some false story, the ignorant can be easily hoodwinked into violence against their own interests.

The ignorance of the masses keeps up an endless chain of infective diseases; one willful, selfish, stupid person is able to bring death and calamity upon an unsuspecting people. To proceed against such contingencies it is necessary to enforce certain health laws and regulations to enable the large intelligent body of individuals in the community to compel the ignorant and will-

ful to accept measures that we know to be just and sensible, as well as scientific.

That seems reasonable from the viewpoint of the body politic. There can be no monetary gain to the medical profession by merely preventing the spread of an epidemic. It is simply a question of government by the majority. Therefore the function of government as regards disease is purely one of prevention rather than of cure; and it is just here that the law and the people touch hands, and it is well for us to run over briefly the instrumentalities used by the people in the scientific administration of the present-day laws of sanitary science.

One must not lose sight of the fact that every township or municipality has the right, under the constitution of the United States, to enforce its own police and health laws, and the general government cannot, in any manner, interfere with this power, unless asked to do so. But the right of every community to administer its own police and health laws carries with it the obligation to society at large to prevent the spread of ities or from one state to another state. So if a town, city, county or state fail to enforce proper health regulations and laws, then there are three ways that other communities or states can protect themselves. The infected town may be quarantined, and its people prevented from leaving their own precincts, or in another method, the town can be made to surrender its charter rights, if the health laws are persistently neglected to the danger of the state at large. Or if one state is negligent, then the other states are protected by the general government. All this seems reasonable and beneficial to a small community, and to the state at large, and to the general government. Nothing could be more simple or be more effective.

The application of just quarantine laws points to the efficiency and well being of a people, and, seemingly, it is no exaggeration to say that the most needful thing for the continued progress of mankind is the proper administration of sanitary science. Without it great cities have perished almost in a night. Without it cholera, unleashed upon the banks of the Ganges, has double quickened around the world in a few short weeks. Without it the plague-stricken rat has crept into boxes of merchandise, clambered aboard ship over the unprotected gangways and hawsers, and has thus been car-

ried along the highways of commerce, from port to port, leaving recurring foci of infections in every clime of the world.

Age after age, great cities and great nations, have emerged from the chaos of barbarism, and for a time have held aloft the banner of progress, and then have gradually succumbed to some mysterious, insidious blight, which has wiped them off the face of the earth. Great nations have made irresistible onslaught upon weaker countries, and have led their armies to the capital cities of the conquered people, to meet there destruction and defeat, not as the result of the conflict of arms, but because of the utter ignorance of sanitary knowledge.

[As, for instance, Bulgaria at the gates of Constantinople today—with cholera ravaging both armies.—Ed.]

And in our own time, and in our own country, business has been paralyzed, cities despoiled of their commerce, the people dispersed in wild panic because of the lack of sanitary knowledge—or rather the willful disregard of it—and because of the stupidity of those, who, through self-interest, have invariably tried to conceal contagious diseases.

But lying about epidemic diseases has always proved costly to the commercial center that has been so blind to common sense and decency. It is a poor business policy, as most of the Southern cities have learned to their sorrow—as San Francisco will acknowledge with shame.

The proper administration of sanitary science gives confidence to the people, and to their commercial interest, instead of causing panic and business paralysis. The last yellow fever epidemic in New Orleans was conducted so quietly by the United States Public Health and Marine Hospital Service that there was no panic, and comparatively no business depression. The last plague recrudescence in San Francisco hardly stirred a ripple of excitement and business went on disturbed.

This desirable condition was brought about, in the end, because the people had come to trust the officers of the Service, and because the people knew that, not only their lives and health would be protected, but also their business interest. And just here the blunt truth prompts the statement that governmental control of preventive medicine is a commercial problem rather than a question of sickness and health of the public.

But this seemingly hard-hearted statement of fact carries with it the solace of a quick-acting efficiency that could not be obtained in any other way. For it is a sad fact, but true, that all such questions are weighed in the balance with gold, but the moment that we can reach the commercial interest and secure the co-operation of business men and succeed in convincing them of the foolishness and futility of trying to conceal contagious diseases then the fight is practically won.

And herein lies the whole secret of the successful administration of sanitary science. Contagious diseases and epidemics cannot be controlled and suppressed by lying. No one can quench the fire of contagion save by scientific methods, administered to a willing, trustful, intelligent and co-operating people, who have sense enough to appreciate that the local work done by the officers of the government for their own community, is for the general good of the whole nation—for the good of the world for that matter. For it is a little mind indeed, who sees in an epidemic only the personal loss, only his own individual grief. Governmental sanitation is broadly ethical in its application, and it should be above human desire and above human greed, and our country's quarantine laws must be so strongly entrenched in public good will that no interest can throttle them, so strong that no man dare stay their application in the hour of need.

A POLITICAL FUNERAL NOTICE.

I have received the following funeral invitation :

After a short illness, died suddenly, in Macedonia,

October 30, 1912, Mr.

STATUS QUO

Diplomat,

At the age of 459 years.

The sad news is imparted to you by :

The Widow: TURKEY;

The Mother: AUSTRIA;

The Mother-in-law: ENGLAND;

The Daughters: BULGARIA, SERVIA and GREECE;

The Nephew: MONTENEGRO;

The Sister-in-law: RUSSIA;

The Cousins in first and second degree: GERMANY, ITALY, FRANCE;

And all other relatives.

The funeral, at which, Sir, you are requested to be present, will take place on one of the first days of this week in the CHRISTIAN CATHEDRAL OF SAINT SOPHIA, IN CONSTANTINOPLE.

Believe in Allah and in his Prophet, and you will have received in Paradise, the eternal carresses of the charming, celestial Houris.

The funeral will leave the place where the dear departed died.

The remains will be buried in ASIA MINOR, in the family tomb.

Poor STATUS QUO! a month ago, he looked so well and healthy. * * *
But, alas! The treatment of the celebrated doctor, European Concert, was of no avail. * * * The unfortunate was doomed to dies of a terrible cardiac attack.

CLEMENT VAUTEL, Paris, France.

(Translated by Joseph Cuneo, M.D., Denver, Colo., from La Tribuna Biellese, Biella, Italy, Nov. 17, 1912).

MISCELLANY

A Winter Trip to Texas and the New Southwest. A revelation and a delightful experience assuredly awaits those who will take the time to make a southern trip this winter. The attractive and beautiful resorts of the Gulf Coast—the thriving, modern cities of Texas, Oklahoma and the Southwest and Southeast, were never more alluring.

Texas is "a mighty empire in itself"—and mere language gives but a fleeting impression of its vastness, either in area or diversity of resources. Twentieth Century progress was never more strikingly represented than in the wonderful activities taking place in Texas. Hospitality, generosity and opportunity may also be well included among its assets. Its possibilities are boundless; in fact they are probabilities, and it may well be called a land of promise and fulfillment.

Climate is one of the most remarkable assets of the state. It's a fine place to work in, but a delightful place to play in. The winter tourist has but lately discovered southern Texas and the Gulf Coast resorts as a prime place for the pursuit of pleasure. Its many new, magnificent and remarkable modern hotels have sprung up like magic. One must test its fishing and hunting to actually believe the stories told of it. Its many bays and harbors make sailing, canoeing and motor boating safe and delightful, giving outdoor pleasure the year 'round. The wide, hard, smooth roads, of which Texas may well be proud, make automobiling, riding and driving one of the principal pastimes. One's comforts and pleasures are more quickly and easily satisfied there than may be imagined. It is difficult, too, to realize the complete rest and relaxation found at sea level, after long residence in high altitudes, until the comparison is actually made.

As to the wonderful and solid growth of Texas and the Southwest generally, it must be seen and experienced to be believed. It has become an active field of operation for "big business" in every form. Unlimited capital is being poured into this section, and Texas towns and cities contain branch houses of most of the prominent manufacturers and wholesalers of the country. It is the paradise of the small grower and truck farmer who take crop after crop from its rich lands. It is the mecca of tourists who want something different—and find it.

One has but to visit the cities of Fort Worth, Dallas, Oklahoma City, Houston, Galveston, Corpus Christi, San Antonio, Austin, Waco, etc., to realize that a New South and Southwest has sprung up, full of the spirit of actually doing things.

Extending to other Countries. It is claimed that more "Storm Binders" are being sent out to every state in the Union,

also to Canada, and even Mexico, than of any other make. This does not excite the least surprise on our part for from an extended experience with them we have come to regard them as well nigh perfect. We have yet to see a patient to whom we have applied one that has not expressed the utmost satisfaction, even gratitude.—(Editor of Mass. Medical Journal, Aug., 1912.)

Euresol Pro Capillis is the regular Euresol, to which a fine perfume has been added, which makes it particularly suitable for cosmetic purposes. The following formula for a hair tonic for the treatment of alopecia and seborrhea can be recommended:

R/	Euresol pro capillis.....	3ij
	Hydrarg. chlor. corros.. gr.	iv
	Spirit formicarum	f3j
	Ol. ricini	f3j
	Spirit q.s.	ad. f3viij

M. S. Wash for scalp (poison). Apply in the morning.

The scalp should be rubbed with the preparation every second day, and good results will be noticed within a week by the disappearance of the itching and dandruff, thereby preventing the loss of the hair.

Also glycerine (50 minims), tannic acid (15 grains), quinine hydrochlorate (7½ grains), salicylic acid (50 minims), etc., may be added if required. Should ol. ricini be used, pure spirit without water must be employed, in order to obtain a clear lotion. Knoll & Co., 45 John Street, N. Y. C.

The Application of Chemistry to Clinical Medicine. It has long been thought that the therapeutic value of cod liver oil did not rest upon its abundance of fatty substances, for while the advantage to be secured from the employment of fats in emaciation and general debility was truly appreciated, yet it was believed that it was to other elements that cod liver oil owed its acknowledged worth.

With an increasing chemical knowledge of cod liver oil, it became an obvious fact that the essential principles of the oil could be separated from the whole product without the loss of therapeutic power in the process, or, in other words, that these isolated principles when applied clinically would produce the effects hitherto secured from the entire oil. It was this practical fact together with the realization that in a vast number of cases any potential value possessed by the oil was more than neutralized by the distress occasioned when a defective gastric apparatus attempted to digest the entire greasy mass, that encouraged chemists to apply themselves to the task of extracting the essential principles and thus relieve the stomach of the burden. In short, chemical science has enabled the patient to secure the very therapeutic virtue possessed by cod liver oil with-

out being forced to digest a large amount of fats. Cord. Ext. Ol. Morrhuae Comp. (Hagee) has long been recognized as the highest type of cod liver oil preparations, for results show that although it lacks the fat which makes the crude oil so unpalatable, yet it still retains those principles upon which the therapeutic value of cod liver oil depends.

"Dietz."—The physician is often out at night, therefore the question of lamps for your motor cars is of extreme importance. For lighting excellence and durability of construction the "Dietz" lamps are in a class of superiority all by themselves.

There are tens of thousands of them in use and the demand growing larger year by year. It is the only absolutely reliable tail lamp burning kerosene. It sheds a clear light on the license number. It shows a ruby danger signal 1,000 feet or more. It is sold in large numbers for export. It may be seen on motor cars in such widely separated places as South Africa, Egypt, India, Norway, Russia, etc. In fact, tourists from America often see the familiar Dietz "Dainty" Tail Lamp in the most unexpected countries. It may be had for kerosene alone or in combination with an electric bulb.

A dependable tail lamp is a necessity for every physician.

R. E. Dietz & Company, Greenwich and Lighthouse Streets, New York City, are making a very special introductory offer to physicians at this time, and every user of a car will do well to write them for full particulars. This firm is the largest manufacturers of lamps for motor cars in the world.

"Kelene," pure Chloride of Ethyl (Fries Bros.)—P. Ravant, M.D., in his work on Lumbar Puncture (Rachicentesis), says: "A jet of ethyl-chloride direct at the point of puncture will produce sufficient anesthesia." "Kelene" in graduated automatic glass tubes furnishes the most convenient and effective method of application. Merck & Co., distributors.

A Therapeutic Requisite for Neurotic Patients.—There is never greater need for careful discrimination than in the case of neurotic subjects. As a result of perverted nervous function the moral fibre of such patients has become weakened, in view of which the physician hesitates to order drugs whose use otherwise would be warranted.

It is in just such instances that Pasadyne is of the greatest usefulness. Pasadyne, as is now generally known, is a standard preparation of the concentrated tincture of *Passiflora Incarnata*, and possesses marked soothing and hypnotic properties. A further distinct advantage of Pasadyne lies in its freedom from the dangers attending the use of drugs producing similar effects. The physician giving it, although he may look

for the same results following the use of chloral or the bromides, need not fear any disagreeable after-effects.

A sample bottle may be had by addressing the Laboratory of John B. Daniel, Atlanta, Ga.

Gynecologic Therapeutics.—The tremendous growth of gynecology in recent years has been confined especially to surgical therapeutics. Even Skene several years ago regretted that medical treatment of female disorders does not receive its merited attention. The practitioner is, therefore, compelled to rely chiefly on remedies which have been tested by clinicians with years of experience having the best opportunity for observation. The most frequent diseases of women are those that arise from functional disturbances of the pelvic organs. For these we call the attention of the medical profession to Dioviburnia, a combination of vegetable drugs, which has stood the test of many years as an efficient tonic and sedative to the female generative organs.

Digipuratum (Knoll).—Digipuratum is of decided therapeutical interest, since a consideration of its composition shows that for one thing the undesirable principles of the plant are eliminated, and for another the principles of known activity are retained. It is described as containing the active gluco-tannoids (glucosides) of digitalis diluted with sugar of milk, so that the physiological action of 1 gm. corresponds to 80 frog units. (1 tablet = 0.1 gr. or 8 frog units). Its uniform therapeutic potency is said to be well maintained. The preparation is physiologically standardized. The increasing employment of digitalis to support the mechanism of the heart renders this standardized preparation of value, and the success that has attended the separation of substances which in ordinary digitalis preparations cause gastric disturbances adds to this value.—The Lancet, June 8, 1912.

Manufacturing agents, Knoll & Co., 45 John Street, New York.

A Seasonable Reminder.—Urotropin in full doses (adults 15 grains, children 2-6 grains, three times per day), given in the early stages of a "cold," assisted by a mild saline laxative, is the modern method of "Breaking it up," far preferable to and safer than quinine, phenacetin, acetanilid, etc.

Based upon its proven excretion by the mucous membranes of the entire respiratory tract, Urotropin medication is also recommended as a routine measure in acute rhinitis, tonsillitis, catarrh, bronchitis, influenza and grippe.

This, however, is only one new field of usefulness of this most diffusible of drugs, which to many practitioners is still known only as a urinary antiseptic. Physicians who have not yet received the new 20-page

It isn't a "cure-all," but
for the relief of pain it's
mighty hard to find a
satisfactory substitute for

BAUME ANALGÉSIQUE BENGUÉ



Its widespread use
through prescriptions
alone, is the best indica-
tion of its standing with
the medical profession.

THOS. LEEMING & CO.,
American Agents,
99 Chambers Street, N. Y.

booklet on Urotropin, recently published by Schering & Glatz, New York, can obtain a copy of the same by addressing the firm, mentioning this journal. It is the best and most convenient way to become posted on Urotropin therapy up to date.

A Systemic Antiseptic.—Although Cystogen ($C_4H_{12}N_4$) is excreted largely through the urine, it has been found in the blood, in the gall-bladder, in the cerebro-spinal fluid, in the middle ear, and in the secretions of the nasal mucous membranes, and the accessory sinuses. It is excreted into the sputum of patients suffering from bronchitis and pneumonia.

The value of Cystogen as a urinary antiseptic has long been recognized, but only during the past year or so has it been used in bronchitis and other infections of the respiratory tract. Its action in these conditions, particularly if given in full doses, is most gratifying. Common colds are aborted if Cystogen is prescribed early, and given at any stage of the infection the pain and congestion are relieved, the excessive secretion is reduced, and the possibility of complications is lessened.

More Than an Alternative.—The term "alternative" is too narrow and indefinite to apply to iodine, as it is now manufactured in a free and active state.

The action of Burnham's Soluble Iodine has been fully demonstrated as one of the most definite and dependable therapeutic facts. Its ability to reduce chronic inflammation, stimulate tissue changes and correct all abnormal processes are too well known to admit of controversy.

Coughs, Colds and Catarrhs.—In all but the most equable of climates a very large proportion of the population suffers more or less from coughs and colds during the winter months. Many individuals who at other times are apparently in excellent health, contract a cold almost as soon as the cold weather commences, and are scarcely convalescent before another attack occurs, until a sub-acute or more or less chronic naso-pharyngeal catarrh is established which is not thrown off until the spring opens. The frequency of such respiratory affections during the winter months is no doubt mainly due to surface chilling from frequent exposure to changes of temperature and the general lack of adequate ventilation of artificially heated houses, stores, offices and schools. Insufficient oxygenation, the longer "housing up" of the individual and the indisposition to open-air exercise in cold weather undoubtedly serve to reduce the general vitality and the respiratory mucous membrane becomes less resistant and more readily sub-

ject to infective and catarrhal influences. When (as is usually the case) the patient cannot correct the unhygienic conditions referred to, it is the part of wisdom to tone up the general vitality of the patient and thus render his respiratory tract more resistant to morbid influences. This can best be accomplished by prescribing Pepto-Mangan (Gude) as soon as the more acute symptoms have disappeared. A thorough course of treatment with this efficient blood builder and general tonic reconstructive very frequently places the patient in a position to successfully ward off further catarrhal attacks.

Chauffeur's Complete Outfit Sacrificed.—Consisting elegant mink fur lined coat, Persian lamb collar, \$35, pair of elegant bear robes \$15 each, Raccoon Cap \$5, pair of fur gloves \$4, pair of goggles 50c. 1 pair leather leggings \$3.50. Will sell separately or the lot, all new, never worn, original price \$225.

G. CHASE,

118 East 28th St., New York.

To Support the Heart.—"Cactina Pillets" will strengthen the heart's action; it does support the heart; and its prolonged use will unquestionably encourage the physiological action of the human pump. And this assistance to the heart and circulation is absolutely without danger or annoyance to the patient. One cannot find a more helpful and kindly drug, and he who pre-judges it, or from bias denies it, without due examination, deprives himself of a valuable aid."

An Acceptional Opportunity.—The Hot Springs Hotel Company of Idaho Springs, Colorado, is desirous of obtaining a managing physician to take general superintendence of their institution. They would prefer a physician who could assume a financial interest in the proposition. The Hot Mineral Springs which are owned by this company, can easily be made as famous as those at Carlsbad and others of world-wide repute. The town of Idaho Springs is only 39 miles from Denver, on the line of the Colorado & Southern Railway, in one of the most beautiful and salubrious spots in Colorado, and there is positively no reason why it should not be developed into an institution of international importance. Address the Company for further particulars and information. The announcement of this company can be seen in the display columns of this Journal.

The Insomnia of Alcoholism.—Of all the insomnias the most difficult to control is that of acute alcoholism. Not only is there wakefulness during the period of convalescence from the restless tossing to and

fro, remorse and gloomy anticipations of the future. In these cases the more recently discovered hypnotics do not reach the bottom of the trouble. Bromidia has a profound influence on the entire nervous system and exercises its sedative effect thereon before the actual hypnotic result is prolonged. The ultimate result is curative, for the effect on brain and cord does not immediately wear off. Furthermore, far from causing anorexia, as similar agents are prone to do, Bromidia actually increases the appetite, a very valuable help in these cases where it is important to build up the system as soon as possible. In all alcoholic cases, the use of Bromidia is greatly to be preferred to the hypodermic injection of morphine, with its inevitable result of locking up the secretions, and its frequently disastrous action on the stomach. If opium must be used, a dose of Papine will accomplish what is desired without any of the bad effects of morphine.

High-Potency Antitoxin.—A noticeable preference for concentrated anti-diphtheric serum (globulin), as compared with the older or "regular" form of diphtheria antitoxin, has manifested itself among the medical fraternity. "High potency, small bulk" appears to be the order of the day. A good index to the tendency in this direction may be found in the offerings of the manufacturers, who, as a matter of course, are promptly responsive to each new demand of the profession. For confirmation of the belief that the concentrated product is now in the ascendancy, one has but to turn to the announcement of Parke, Davis & Co. in the current number of this journal, "Antitoxin That Justifies Your Confidence." Here one finds prominently featured the concentrated antidiphtheric serum (or globulin). It is interesting to note in this connection that a wider range of dosage than formerly is now offered—from 500 to 10,000 antitoxic units—the larger doses, of course, being provided for severe, late or other exceptional cases. And herein, at least, is one undisputed point in favor of the concentrated antitoxin: when a large dose is needed, it can be administered in this form without difficulty and with little danger of disturbance, owing to the comparative smallness of its bulk.

Some physicians, it may be noted, are under a misapprehension as to the nature of the concentrated antidiphtheric serum (globulin), assuming that it is widely different from the product which they have known for years as antidiphtheric serum. The idea is wholly erroneous. Concentrated antidiphtheric serum (globulin) is the regular product, precipitated and purified, from which most of the serum constituents have been eliminated except those bearing the antitoxin. It is in no sense inferior to the original serum—on the contrary, as previously noted, it possesses the advantage of lesser bulk.



OSTEOSARCOMA OF CLAVICLE. Roentgenogram by Dr. Stover.



OSTEOSARCOMA OF CLAVICLE. Roentgenogram by Dr. Stover.

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FRACTURE OF THE CARPAL NAVICULAR.

LEONARD W. ELY, M.D.,

Denver, Colo.

The laity cherish a deep-rooted conviction that a sprain is often a more serious injury than a fracture. The conviction is an erroneous one, and probably owes its existence to the fact that many "sprains" are in fact unrecognized, and therefore improperly treated or neglected, fractures. Carpal fractures belong distinctly in this class. Only since the introduction of the Roentgen rays has their frequency been suspected. The American Text Book of Surgery, edition of 1894, does not even mention them. Codman and Chase were the first to appreciate their importance. Their monograph (1) placed the diagnosis and treatment of fracture of the navicular upon a sound basis.*

Fracture of the carpal navicular bone is a fairly frequent injury. It is caused usually by a fall on the superextended hand, or by punching with the fist clenched (probably the case in the "sprained wrist" of boxers), rarely by superflexion of the hand or by direct violence. The bone appears to be cracked as would be a nut in a nutcracker. Occasionally the semilunar is dislocated anteriorly at the same time, and takes with it the attached (proximal) fragment of the navicular.

Fracture of the navicular is much more common in men than in women. All the cases of which I possess histories were in men and boys. It sometimes accompanies a Colles fracture.

Symptoms: Pain and swelling are usually present. The radial side of the wrist is swollen. The pain is more or less localized over the region of the

navicular, and is increased by forced radial abduction of the hand and by crowding the navicular against the radius. The diagnostic point of most importance is the sensitiveness to pressure in the "anatomical snuff-box." Motion is usually limited and painful in all directions. Ecchymosis may or may not be present. Crepitus sometimes can be elicited, more often under an anaesthetic.

If the semilunar be dislocated, all the symptoms are aggravated. A marked thickening can be discerned over the radial side of the front of the wrist. Motion is greatly restricted, not only in the wrist but in the fingers. Extension of the middle finger is sometimes especially restricted. The injury is a much more severe one than simple fracture. The deformity and the disability may be extreme, the former sometimes partaking somewhat of the nature of "silver fork."

Diagnosis: The two lesions which must be differentiated are sprained wrist and fracture of the radius.

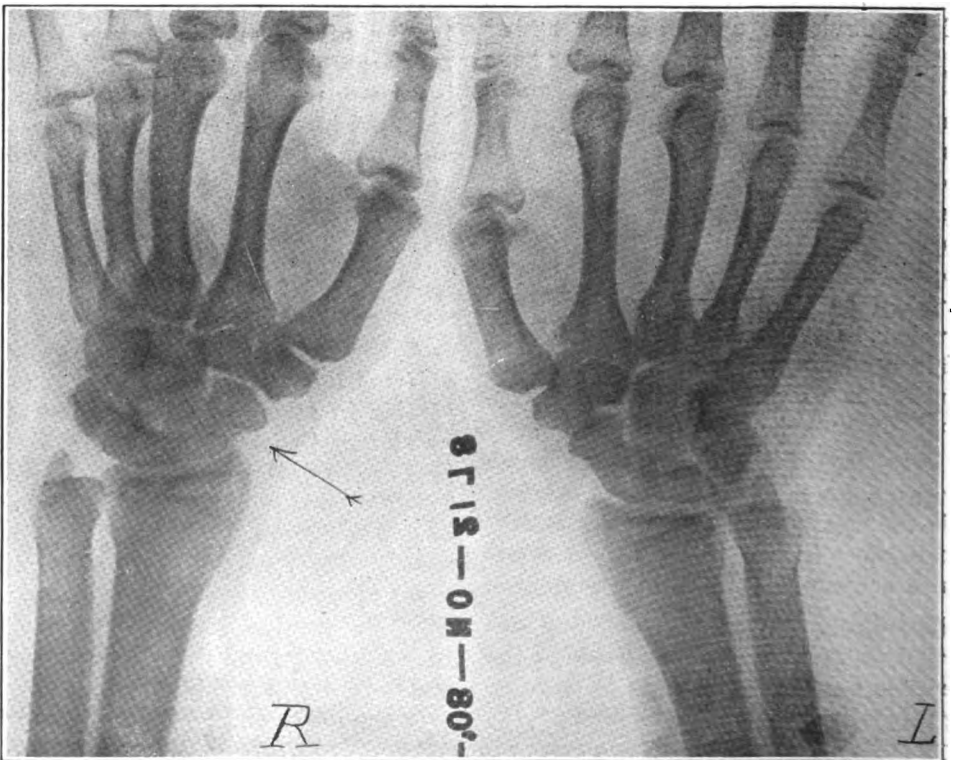
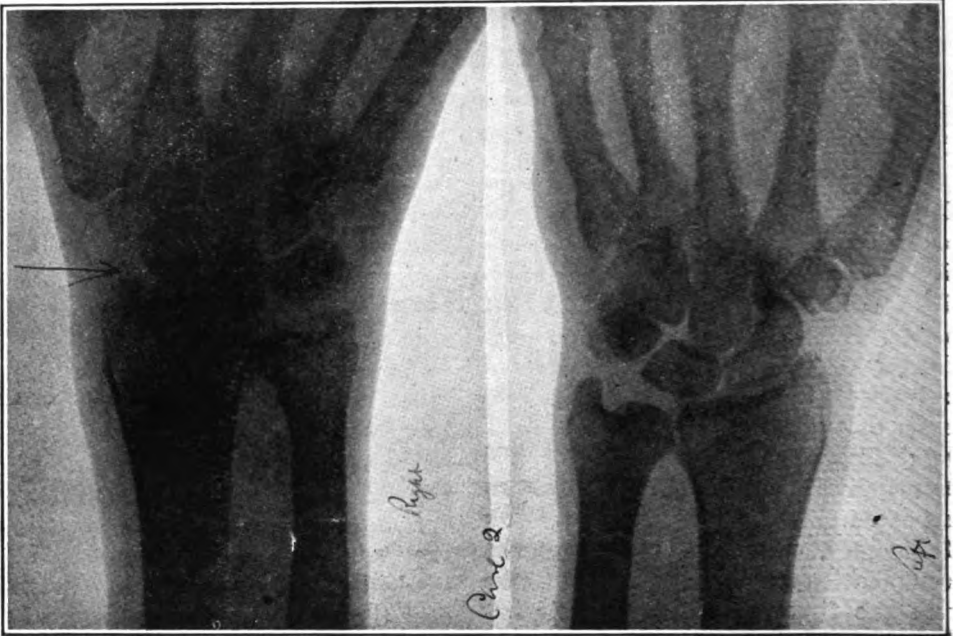
A sprain is painful only when the affected ligament is put on the stretch. Motion in other directions is free and painless. Codman and Chase affirm that sprains all recover in three weeks, but it is most important that treatment be begun before the expiration of this time. Therefore this diagnostic point is not of great value, for we are not justified in waiting for its development. In Colles' fracture the sensitiveness and swelling are higher up, that is, over the lower end of the radius. Clin-

*Annals of Surgery, March and June, 1905.

ically, I believe the diagnosis is impossible between an old Colles' fracture, and an old fractured navicular

with dislocation of the semilunar, unless we make use of the X-rays.

In making the diagnosis, a skiagram



is of the greatest importance. The Roentgen rays should always be used when they are available, and a picture should be taken of both wrists, in order to detect slight differences in the bones. Although the other bones of the wrist are occasionally fractured, the navicular suffers most frequently by far.

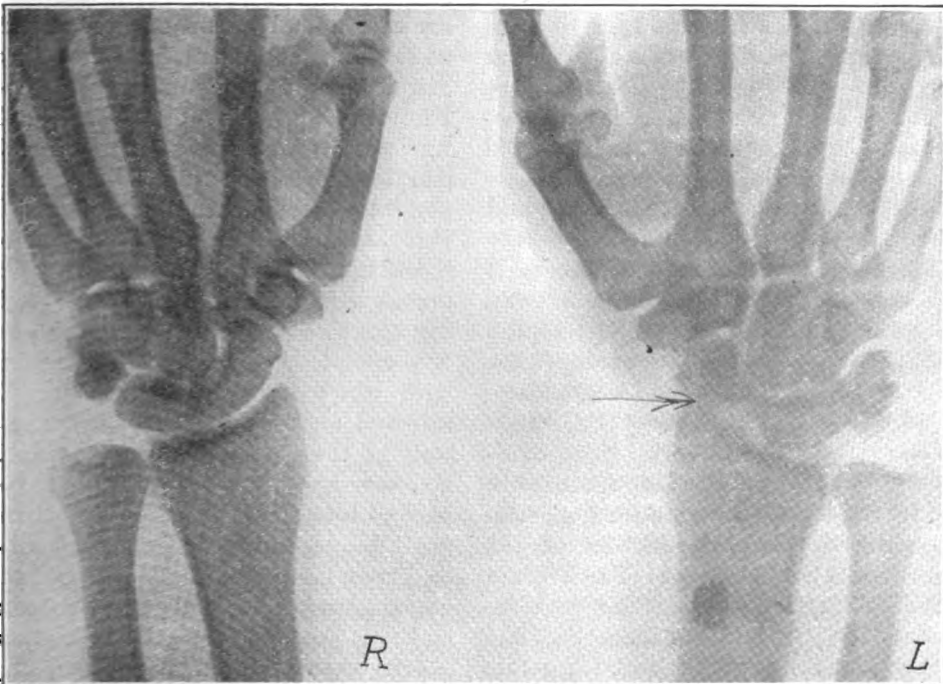
Prognosis: If fracture of the navicular be promptly recognized, and properly treated, the outcome is usually favorable; otherwise more or less disability will remain. According to Codman and Chase, non-union of the fragments is the usual result if early treatment by immobilization be not carried out. In this case the function of the wrist is impeded, and the patient suffers pain. The disturbance of function in fracture of the navicular, with unreduced dislocation of the proximal fragment and of the semilunar, is very great, and renders the hand of little use.

Simple Fracture. Treatment: Codman and Chase strongly recommend early immobilization, and with this I

agree. If the case be seen within two or three weeks an earnest effort should be made by immobilization to secure union of the fragments. My favorite form of dressing is a plaster of Paris gauntlet, reaching from the elbow to the metacarpophalangeal joints, and slit up either on the radial or on the ulnar aspect. To guard against displacement of the fragments, it is an excellent idea for the surgeon to press his thumb and finger anteriorly and posteriorly over the location of the navicular, into the plaster while it is setting. The dressing is worn for three or four weeks, and is replaced by a circular adhesive strap.

In older, untreated cases, where we have to do with non-union, we may think well to adopt massage and strapping for the relief of pain, but if the symptoms are severe, we shall probably be compelled to excise the proximal portion of the navicular. The operation is easiest done through a dorsal incision.

Fracture of the navicular with dis-



location of the semilunar: The first indication is to reduce the dislocation of the semilunar, to which a fragment of the navicular usually is attached. The hand is first super-extended, and then, while the surgeon makes pressure with his thumbs on the flexor surface over the dislocated bones, the assistant

brings the hand forcibly into superflexion. An anaesthetic is advisable.

If reduction be not successful, then the dislocated bones should be excised. In this case an anterior incision is advisable, for, through the posterior incision removal of the anteriorly dislocated bones is not practicable.

THE USE OF A BLOW-TORCH AND LARGE AUTODERMIC GRAFTS IN THE TREATMENT OF ACUTE AND SUB-ACUTE OSTEOMYELITIS.

C. E. TENNANT, M.D.,

Denver, Colo.

Bone infections are always of serious import, because of the protracted periods of convalescence. This is particularly true with the industrial class. Since bone structure will not readily close in about infected areas and cavities, it becomes necessary to substitute some media which will temporarily fill the cavity and act as the frame work or scaffolding for the later structural osseous infiltration.

While the wax medium has been found to be most satisfactory for this purpose, yet it seldom if ever remains in position in the presence of acute or sub-acute osteomyelitis. This failure is due to the progressive osseous liquefaction about the walls of the infected bone cavity, the liquefying process naturally loosening the attachments and anchorage of the wax plug. Because of this same active infective process, it is seldom possible to cover in the wax plug and the bone with the enveloping soft tissues, and as a result the bone plug invariably loosens, softens and escapes.

Recently I have undertaken to overcome these two unfavorable features in the treatment of the acute form of osteomyelitis by the introduction of the industrial blow-torch, which delivers a needle-point flame, this being used to completely dry and sterilize the bone cavity and its margins; following this

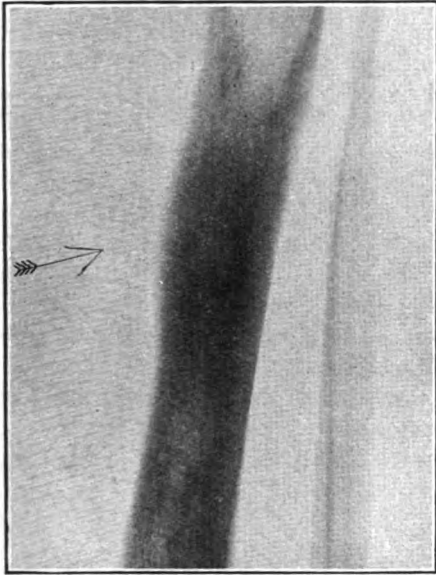
a thorough-packing of the cavity with the Mosetig-Moorhof bone plug, and finally covering the whole with a large autodermic skin graft.

While a discharge of some pus and softened plug may follow, yet it is possible to retain the greater portion of the bone plug as well as the skin graft, thereby shortening the period of disability by fully one-half.

The Mosetig-Moorhof wax bone plug is composed of 30 parts each of spermaceti and oil of sesame, to which is added 40 parts of iodoform, the ingredients being first separately sterilized. I have been in the habit of having this wax put up for me in sterile collapsible metal tubes, these tubes being dropped into a water bath of 100 deg. Fahr. just before using. An alcohol blow-torch delivering a needle-point flame makes it possible to direct the sterilizing agent deep into the septic bone cavity, completely sterilizing everything with which it comes in contact. The infected margins of the soft tissue as well as the cavity are treated in like manner, and after the wax has been packed into the cavity, the autodermic graft is placed, and over all a rubberized open mesh dressing is laid and bandaged into place. This last procedure makes it possible for drainage and easy access to the wound for the dressings,

without distorting the margins of the graft.

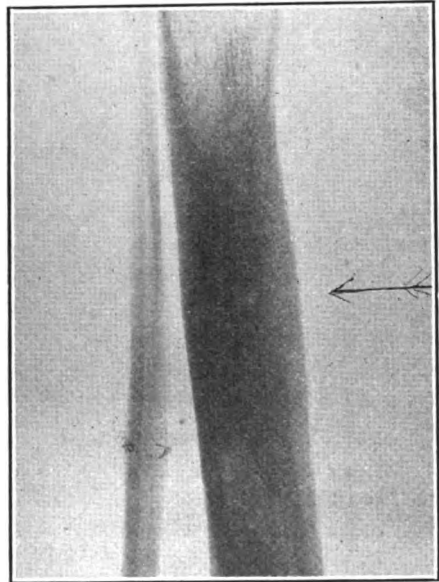
C. E. R., age 28. Has had several attacks of osteomyelitis of right tibia since thirteen years of age, for which he has had several drainage operations.



He has been well for the past five years until last July, when he injured the same tibia again. Following this he developed pain and tenderness in the lower third of the right tibia, with redness and swelling of the skin over the site of trouble and a temperature of 101°. There was a dissecting abscess under the periosteum at this point, and skiagrams taken by Dr. Stover disclosed the site of the infection deep in the bone.

After a preliminary with the mixed phylacogen serum for about ten days, during which the patient showed a decided reaction to the treatment an operation was done at St Joseph's Hospital, a free incision of the soft tissues was made and the cavity in the tibia laid open by wide chiseling well outside the infected area. After wiping out all accessible moisture the long needle-point flame was used in the

cavity and about the margins and walls, coagulating and incinerating the blood and pus, leaving a dry charred cavity. The soft bone plug was then forced into the cavity from the collapsible metal tube and packed well into the deep interstices of the bone canals. Following this a large graft comprising the full depth of skin was taken from the inner surface of the thigh and stitched to the margins of the soft tissues surrounding the cavity; completely covering the bone plug and the denuded



bone surface. Some drainage occurred from the lower margin of the flap, with the escape of a small quantity of the wax; the graft, however, became fixed and so effectively protected the plug that recovery was rapid and the patient resumed work in about six weeks. A slight discharge continued from the lower point of the graft and the epithelial surface of the latter mummified; otherwise repair has been very satisfactory, and the patient was spared the period of disability and daily packings of the cavity so common with these cases.

612 Empire Bldg.

CANCER OF THE PENIS, WITH REPORT OF CASES.

OLIVER LYONS, M.D.,

Denver, Colo.

This paper is based on a study of three cases of malignant disease of the penis, which occurs almost invariably as epithelial carcinoma. This condition is rare. Andrews, in 7881 cases of primary cancer in all regions, saw only 62 cases of cancer of the penis, or 0.78%. Its frequency is variously estimated up to 3%. It is most common in the sixth decade, and after that in the fifth and seventh. However, it has been seen in patients under twenty.

Age: In this series 49, 52, 65.

Civil State: All cases were married.

Almost every treatise on cancer of the penis states that the disease may result from contact with a cancerous cervix. This was certainly not an etiological factor in this series of cases, and there are no facts at hand to even warrant the assumption that cancer of the penis may even remotely originate from cancer of the uterus.

Occupation: One harness maker, one cab driver, one grave digger—was of no great importance and in no way believed to be a contributing factor. The fact that all three cases were laborers might suggest that trauma played its part. However, none of the patients could recall ever having had an injury to the penis.

Heredity: In none of the cases was there a family history of cancer.

Nationality: There was one Irishman, one German, one American.

Venereal Disease: All acknowledged gonococcal infections, but there was not even a suggestion of syphilis being an etiological factor, and from the number of syphilitics we see compared with the few cases of cancer of the penis, this disease can hardly be considered other than as a very exceptional cause.

Character of the growth: All three cases were the cauliflower or prolifer-

ating type. All were bathed in a thin, horribly foul sanguino-purulent secretion; this was probably due to a low grade ulcerative process, which goes on in the interstices of the cancerous mass. This annoying complication disgusts the patient with himself and those with whom he comes in contact.

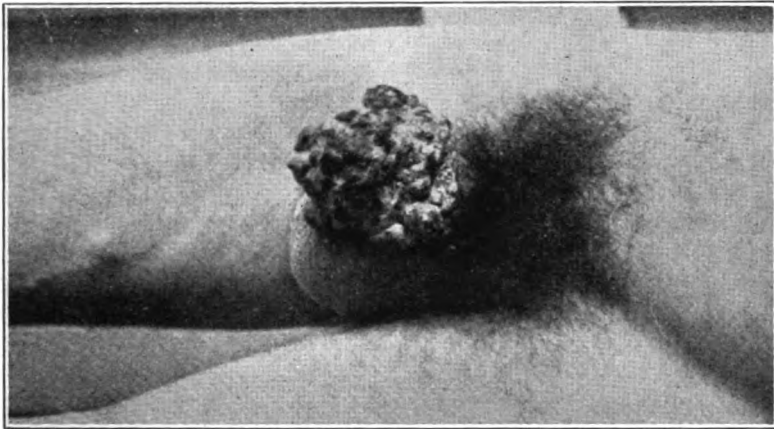
Starting Point: All started in the coronal sulcus near the frenum. In none was the growth limited to its point of origin, but had spread so as to involve glans, prepuce and shaft of the penis. There was also an infected patch on the scrotum along the median raphe. In one of the cases this was due to extension of the growth from the shaft of the penis. In the other two there was an island of healthy tissue between the two growths, and it appeared that the growth on the scrotum had originated by contact from the primary sore on the penis.

Phimosis: All this series gave a history of phimotic foreskin. One case I circumcised six years previous to amputating his penis. With the negligent personal habits of men with a phimosis, harboring the decomposed secretions which constantly keep the glans and foreskin bathed in a foul, acrid discharge, it is not surprising that the soil is fertile for the growth of warty vegetations, which very rapidly degenerate into malignancy, especially in old men.

I do not know that the Jew is immune to cancer of the penis, but in a search for literature on this subject I cannot find a case occurring in a circumcised Jew, and the only case of cancer in a circumcised man was the above mentioned case that I circumcised two years previous to the development of a horn about three-fourths of an inch long on the dorsum of the penis, at the mucocutaneous junction. At the time the pa-

tient presented himself for this condition, I noticed two small warty growths in the coronal sulcus on the left side near the frenum. The patient was sent to Dr. Stover, and after a few treatments by the X-ray the horn dropped off and the warty growths apparently atrophied. However, the warty growths returned in the same location in about two years. Fig 1 shows the result of about a two years' growth.

involved in both cases before the urinary symptoms occurred. The fistulous openings were well forward within the first inch of the meatus. No fistulous opening was ever observed in the dorsum of the penis. This is not unusual, as it is a well known fact that the sheath of the corpora cavernosa stoutly resists the invasion of the disease. The urinary symptoms consisted of frequent, urgent burning urination; at times one



Cancer of cauliflower type, involving penis and scrotum. Patient, 65 years old, urinated through several fistulous openings in the glans. Complete amputation with emasculation; both groins dissected. Patient alive and in good health, 16 months later.

Pain: All the cases complained of more or less constant itching in the early stages. Aside from the pain on urinating, it was not especially characteristic and did not cause severe suffering. There was an occasional darting pain in the region of the growth, and some slight pain in the groin, radiating down the legs. These pains were always a late symptom, appearing only after the growth had existed many months.

Urinary Symptoms: In two cases these were caused solely by the disease occluding the urethral orifice by extension. After the canal had become obstructed, the urine would always find its way through one or more—usually several fistulous openings on the floor of the urethra. The entire glans was in-

small stream, and at other times several. One case had incontinence from over-distention of the bladder. In other case the urinary symptoms preceded the urethral obstruction, which was not marked—in fact, this was the only case where it was possible to pass an instrument into the bladder. A number 14 F. sound was passed with considerable difficulty at the time of operation. This, however, was followed by considerable bleeding. The urinary difficulties in this case continually grew worse after the operation, and on cystoscopy, three months after, the bladder was found to be involved. The patient refused another operation for his relief, and died four months later from exhaustion. This case undoubtedly had a cancer of the bladder at the time his

penis was amputated, but whether or not it preceded the lesion on the penis, I am unable to say.

Glandular Involvement: There was a unilateral involvement of the inguinal glands in all cases, but whether or not this was due to cancerous or pyogenic infection I am unable to say, as no microscopic examination was made. Neither am I able to state at what time the glands became involved, as all the cases were seen late excepting one, which was seen very early, when cancer was not suspected. This case soon passed from my observation and was not seen again until late, when the whole penis and part of the scrotum were involved. The prepubic glands were infected and suppurating in one case. The distribution of the lymphatics of the penis is very important when we come to consider the prognosis. However, I know of no way of diagnosing infection of the lymphatics and glands ante-mortem.

Lymphatics of penis: These may be divided into three groups: 1. Those of the skin proper. 2. Glans. 3. Urethra.

(1) Those of the skin originate around the region of the median raphe and turn around the sides to the dorsum, running backward to the angle of the penis, where they turn outward and empty into the nearest superficial inguinal gland. Those originating in the prepuce run directly backward along the side of the superficial dorsal vessels; thus, amputation of the penis by leaving a dorsal flap should be abandoned, as lymphatic tissue is included in the flap unless the lymphatics have been removed.

(2) The collecting trunks from the glans run first to the frenum and then join trunks from the urethral mucous membrane, and are then reflected backward in the coronal fold until they meet in the center. From here they form trunks which accompany the deep dorsal vessels. Arriving at the symphy-

sis, they intercommunicate freely, forming some glandular nodules. Several trunks are formed from these nodules, which run out beneath the fascia of the thigh and terminate in the deep inguinal glands. Other trunks from these glandular nodules pass up through the inguinal canal behind the cord and terminate in the external retrocrural gland.

(3) Those of the urethra are not important channels of infection in early cancer of the penile portion of the penis. It is only when the bulbar urethra is primarily affected, or when disease of the penile portion is extensive—especially after blocking of the above mentioned collective trunk—that metastasis may take place. The collecting trunks that arise from the mucous membrane in front of the navicular fossa join those from the glans and terminate in the same lymphatic gland. Those originating just back of the fossa pass posteriorly with the trunks from the ejaculatory ducts, seminal vesicles and vas deferens.

The bulbar and membranous portions of the urethra have three collecting trunks: 1. One following the external pubic artery and artery of the bulb, terminating in the intrapelvic gland. 2. Running under the symphysis and ending in the external retrocrural gland. 3. Running upward over the anterior surface of the bladder, joining a trunk from its surface, and finally terminating in the internal iliac chain.

Evidence of internal metastasis: In one case there was considerable doubt as to whether an operation was indicated. This patient was very cachectic; had marked edema of the legs, anasarca, nausea and vomiting, all of which, however, subsided after the operation. This patient was given the cancerous extract. It may have been a coincidence, but this patient certainly did gain very fast after injecting the cancer residue; before its administration the gain was very slow.

Recurrence: One case died seven months after operation from cancer of the bladder. It is very probable that this condition existed at the time of operation.

Still Living Without Recurrence: One, 11 years; one, 16 months.

Diagnosis of Cancer is only difficult in the early stages of the growth. The existence of chronic or often recurring fissure, thickened scaly patches, warty growths and vegetations, particularly in elderly men with a phymotic foreskin, and more especially if these apparently simple lesions are rebellious to ordinary treatment, may give a clue to its nature. In the late stage when syphilis is suspected, iodides and mercury will soon clear up the diagnosis, but it must be remembered that failure in any suspected case must not be determined absolutely until treatment has been tried in all its various forms and pushed to the point of tolerance on the part of the patient. Sections of the growth should be examined as early as possible and will clear up all doubt.

Prognosis: Without operation this is, of course, bad. If operated on early before there is much glandular involvement, it is generally considered that if the patient lives three years without a recurrence it is safe to consider him cured. However, recurrence has occurred after a lapse of 15 years. The same prognosis should be given here as in other parts of the body. No case should be considered cured unless proven by autopsy. It should be remembered that in young, emotional individuals whose mental stability is insecure, total amputation with emasculation may be followed by profound melancholia, but fortunately this disease is seen at a time of life where sexual matters are in abeyance.

The object of all modern operations for the removal of cancer, wherever occurring, is not only to remove the primary growth en masse, but the removal of all fat, glands, and lymphatic

vessels intervening between the primary growth and the area of probable secondary extension. Cancer practically always originates on the surface of the glans or prepuce, and more frequently in the sulcus of the corona near the frenum. Cancer of the penis extends along the dorsal lymphatic channels on either side of the dorsal vessels, and affects the superficial and deep inguinal glands of the groins. It is only late in the disease, after the corpora cavernosa and corpus spongiosum have become involved, that the intrapelvic glands are affected through the lymphatics which pass under the pubic arch.

Operation: When the disease is confined to the distal end of the penis, the parts likely to be infected lie along the dorsum of the penis and either inguinal region, but if the bulb or membranous urethra is affected, the intrapelvic gland may be involved, and complete removal of the penis is necessary. Even then, the prognosis is not so good.

The first step in the operation is the complete covering up of the cancerous mass. After thorough washing and drying, a piece of dry, sterile gauze is wrapped around the penis, including the cancerous tissue, and this is covered by gutta percha tissue and tied tightly behind, so that no fluid can be squeezed backward. A good, stout condom answers this purpose admirably. Skin incisions are made as follows:

From opposite the internal ring, along the track of the cord, bending slightly inward to reach the middle line at the angle of the penis; from this point outward and downward across Scarpa's triangle, the skin is reflected well back; all arteries are ligatured as they are met with, and removed with the glands. There is no danger at this stage of wounding the large vessels of the thigh, which lie deeper, but as the saphenous opening is approached more care must be exercised. Here the deep fascia should be opened and the fat and

glands removed. The inguinal canal should be opened freely. The retro-crural glands will almost always be found enlarged and hard, and are easily removed. The peritoneum is pushed upward and all glands and fat removed, whether enlarged or not. The spermatic cord is ligatured high up, cut, and removed from above, downward, and the whole mass of glands, fat, and fascia, and all vessels removed from the canal. Hemorrhage having been arrested, the cut ends of Poupart's ligament are adjusted by sutures and the skin sewn into place. A similar dissection is done on the opposite side.

The patient is now placed in the perineal lithotomy position. On account of the extensive involvement of the scrotum in all these cases, two lateral incisions are made on the side of the scrotum at its junction to the perineum, leaving enough skin on each side to cover the perineum. After removing testes, these two lateral incisions are joined by a circular incision just behind the scrotum. By blunt dissection, the corpus spongiosum is freed from its attachment to the cavernous bodies. The urethra is now freed as far back as the triangular ligament, cut across and placed to one side until the succeeding steps of the operation are completed from above. The skin flap is pushed back toward the pubis, the suspensory ligament divided, and the cavernous bodies separated from their attachments to the ramus of the pubis until only the crura remain. Owing to the close attachment of the crura to the bones, its separation is a matter of considerable difficulty, and may be followed by a free hemorrhage which is

not easy to control, especially if the periosteal elevator is used. However, this procedure may be rendered bloodless by employing the angiotribe advised by Downes. I employed the Paquelin cautery in one case to burn through the crura close to the attachment to the bone. By this method the corpora cavernosa were readily freed from the pubis without hemorrhage, but the operation was followed by a troublesome slough. All bleeding being controlled, the detached penis, with the mass of fat and glands removed from the groin, together with the testes and scrotum, are removed en masse. The skin wound is closed with silkworm-gut sutures, the urethra split in the median line for one-half inch and fastened in the lower part of the wound in the median line, about one inch in front of the rectum.

There is considerable shock after this prolonged and extensive operation, but by keeping the bleeding well under control, even old, debilitated patients are not beyond hope of a cure.

Drainage is necessary, as the free removal of so much tissue is followed by an excessive secretion of lymph that has a tendency to distend the wound.

When the patient is placed in bed his knees should be slightly flexed; otherwise the skin wound in the groins will have a tendency to bridge, whereas it is necessary to keep it in contact with the deep tissues. This may be easily done with a pillow under each knee, and the free use of dressings secured by a double spica bandage.

A soft rubber catheter may be fixed in the urethra, or regular catheterization may be carried out for a few days.

EMBARRASSING.

Little Mary: "Mother, when I die will I go to heaven?"

Mother: "I think so; you've 'most always been a good little girl."

Little Mary: "And you, mamma, will you go too?"

Mother: "I hope so."

Little Mary (fervently): "Oh, I do, too; for 't would be terribly awkward to be pointed out in heaven as the little girl whose mamma was in hell!"—(Harper's Magazine, July, 1912.)

GALL STONES WITH GLYCOSURIA.

FROST C. BUCHTEL, M.D.,

Denver, Colo.

With a Case Report by G. K. Olmsted, M.D.

Leonard W. Bason, who wrote the section on General Surgical Prognosis, in the last large System of Surgery published says: "The disastrous effects of surgical operations upon diabetics have led some to the absolute proscription of all operation in the presence of this disease." He further says: "Nor do recorded observations throw any light as to the liability to post-operative accidents of diabetics whose diabetes comes as the concluding member of the 'biliary sequence,' as compared with those whose diabetes has had no antecedent cholelithiasis, biliary stasis, and chronic pancreatitis. Both of these points, however, merit consideration."

William J. Mayo, in an article on "Pancreatitis Resulting from Gall Stone Disease," makes the point that in 2200 operations on the gall bladder and biliary passages the pancreas was coincidentally affected in 6%. In 81% of the pancreas cases the disease was due to or accompanied by gall stones. In the common and hepatic duct cases the pancreas showed disease in 18%, against 4% where the gall bladder only was involved.

Reginald H. Fitz says: "The presence of glycosuria should arouse the suspicion that the pancreas may be diseased."

Opie believes: "1. That in considerably more than half of all cases diabetes is the result of a destructive lesion of the pancreas. 2. Where diabetes is the result of pancreatic disease, injury to the islands of Langerhans is responsible for the disturbance of carbohydrate metabolism, since that influence which the normal pancreas exerts upon the assimilation of sugar is a function of these structures. 3. The most com-

mon lesions which injure the islands of Langerhans are chronic interstitial inflammation of the interacinar type and hyaline degeneration. 4. Other lesions of the pancreas do not exhibit a tendency to select the islands of Langerhans, but produce diabetes because they destroy the interacinar islands along with the secreting parenchyma."

Robson refers to four cases of cholelithiasis that were accompanied by glycosuria, in three of which operation was followed by disappearance of sugar from the urine.

With reports of this kind it is difficult to understand statements like the first one in this article, yet it is true that many medical men do coincide with that opinion.

The presence of gall stones is an indication for operation, and if sugar is present in the urine the necessity for operation is greater than if the urine is negative to sugar.

The danger of delay in any gall stone case is sufficiently great when one considers cholecystitis, the formation of diverticula, perforation, cancer and other complications, but with the presence of sugar one is warned that another very important organ is already involved and delay may result in irreparable damage to the pancreas.

Nature does not require us to be very keen. She gives us ample time to make a diagnosis. In animal experimentation it has been shown that if one-fourth or one-fifth of the pancreas is left, carbohydrate metabolism is not materially disturbed. It seems as though one should be able to determine the presence of chronic pancreatitis before three-fourths of the gland is destroyed.

Nature has again been kind to us in that the usual pancreatitis (the inter-

lobular), that comes from a damming back in the ducts is not the variety that has an early effect on the islands of Langerhans.

If interacinar pancreatitis were caused in this way, the association of glycosuria with gall stones would be much more frequent than it is.

In making a differential diagnosis between gall stones and cancer the size of the gall bladder is always noticed very carefully. Courvoisier's law is as follows:

"In cases of chronic jaundice due to blockage of the common duct a contraction of the gall bladder signifies that the obstruction is due to stone; a dilatation of the gall bladder, that the obstruction is due to causes other than stone."

This law is excellent when one keeps in mind the exact phraseology and not a modification of it. Cabot found that it held good in all but 5% of every record in the Massachusetts General Hospital.

The modification of the law that is misleading is well illustrated by Mayo Robson's statement. In 1892 he wrote: "Distension of the gall bladder, accompanied by jaundice, has in all the cases which I have observed, and in those cases where I have operated, turned out to be dependent on cancer, either of the head of the pancreas or of the common duct."

If one interprets every distended gall bladder with jaundice as cancer, he will allow a certain number of patients to die that could be cured by operation, because chronic pancreatitis will give a dilated gall bladder. In some of these cases the head of the pancreas can be palpated. It feels nodular and fairly hard, so the diagnosis of cancer is very apt to be made.

It is just here that a very careful history will many times be of great service. If the history, a careful examination of the urine and feces, test meals, a test dose of 100 grains of

glucose, etc., do not clear up the diagnosis, give the patient the benefit of the doubt and have a cholecystostomy or a cholecystenterostomy done. Some patients with a pancreas that is deceiving even at operation will recover after such a procedure.

A case report illustrating some of the above points is here presented:

Case History.

Mrs. L. W., was born in Indiana, May 18, 1853. Her father is still living at the age of 92. Her mother died at the age of 52 from typhoid fever. Her grandparents all lived to old age. Otherwise the family history is negative. As a baby she contracted malaria and was unable to walk until nearly three years of age. From this time she seemed to enjoy the very best of health up to the age of 51. She was married at 16 and had ten children and two miscarriages. Five children are living and well. Five died in early childhood.

In her 51st year she noticed that she was passing a great deal of highly colored urine and was losing weight rapidly. As she had weighed from 200 to 260 pounds from the age of 24 to the age of 50, the loss of over 50 pounds worried her and she sought medical advice. Her physician prescribed a tonic and told her that "nothing was the matter with her." In the fall of the same year she began to lose weight again rapidly and was told that she had diabetes. An examination of her urine showed over 10% of sugar. She improved on a strict diet and her weight increased to 240 pounds.

During the next two years the patient lapsed from the dietary discipline, as is usual in such cases. In 1907 she again complained of loss of weight, general pains and particularly severe pain over the left hip. A prominent clinician at this time suspected carcinoma. The patient then took up Christian Science, but the loss of weight con-

tinued and the symptoms became more aggravated.

Another physician at this time told her that she had gall stones and diabetes mellitus. Her attacks became more frequent, and in February of 1911 I saw her for the first time at her home in one of them.

Physical examination showed nothing in the heart or lungs. A relaxed, pendulous belly-wall made palpation easy. A general enteroptosis of the abdominal viscera was present. The lower margin of the stomach was easily one inch below the umbilicus. The gall bladder was enlarged, but was not tender at this time. The patient complained bitterly of severe pain in the epigastric region and of the nausea and vomiting.

Three weeks after this attack she had a definite cholecystitis, with a tender, distended gall bladder and with constant pain in the right hypochondrium. She had reflex pain under the right scapula and her vomiting was more severe. At this time she refused operative interference, saying she "preferred to die whole." She rapidly lost weight and in two weeks she had another attack; this time followed by deep jaun-

dice. I then called in another clinician. The patient weighed about 140 pounds. A markedly distended and tender gall bladder was noted. A hard mass was felt near the head of the pancreas. The woman was anemic and was losing strength. Her urine showed 10% sugar. A malignant tumor was suspected.

In March the patient improved on a Von Noorden diet and showed no sugar in her urine for over a year. Her symptoms were relieved and she improved in health. In May of 1912, while I was out of town, she went to an oculist for failing vision. He advised an operation for cataracts, which she refused. On my return I found that the sugar was again 10%. Her eyesight improved; at least the diabetic retinitis subsided on a strict diet, although an operation will eventually be necessary.

In July, 1912, she had two severe attacks of cholecystitis and operation was insisted on. On August 17th she was operated upon at St. Luke's Hospital. At the present she is practically a well woman. Her eye sight has improved. The last test for sugar showed less than one-third of one per cent.

G. K. OLMSTED.

EXTENSION IN FRACTURES OF THE FOREARM.

GEORGE W. MIEL, M.D.,

Denver, Colo.

Dealing with closed fractures of the forearm we often have to do with shortening, owing to passing or overriding. This may be overcome in some instances, but resumes in others notwithstanding proper manipulation. Occasionally it is overlooked or not ascertained until adhesions interfere with or preclude reduction and perhaps give occasion for operation.

Within the period of some ten days, most of these cases can be cared for satisfactorily without operating, if suf-

ficient extension can be maintained. There's the rub; or it would seem to be; and yet usually it is not a serious contention. Dealt with early, taking advantage of X-ray findings, shortening or the tendency can usually be efficiently overcome. Later it becomes more difficult, and less satisfying. However, unless gross it is seldom of serious detriment to the individual, though usually seriously regarded. Books would seem to leave us to our own devices.

In my own cases of this nature I have employed with advantage a means supplemental to the more or less usual anterior and posterior splint dressing. As a preliminary I attach to the hand, front and back, zinc oxide adhesive plasters of two and a half inches width, in separate straps that they may reach from above the wrist to some six inches beyond the extended fingers; allowing them below to come neatly into adhesive contact, and maintaining them above the wrist and about the knuckles by encircling strips. Then proceeding with and concluding the usual splint dressing, and with the forearm at a right angle, I apply a plaster of Paris encasing bandage, including the hand—not tightly—and the lower arm. When this fixes, I include beneath the enveloped forearm by more turns of a

plaster of Paris bandage, a light, flat, wooden splint designed to project an inch or two beyond the extended fingers. This having a cross-piece at the end, rising an inch, affords means of extension when the double adhesive strap extending from the hand is drawn taut over the end and maintained beneath by desk tacks.

The completed dressing should now have fixed relation to the extremity, and not giving otherwise—slacking of the traction strap that follows should correspond in some degree with, and be taken as evidence of extension attained. Tension should not be uncomfortable, and slack having been taken up several times—easily estimated in total, it then remains usually to maintain the strap taut until the purpose has been served.

ADVANTAGES OF THE PUBIC INCISION OVER SCROTAL FOR VARICOCELE OPERATIONS.

L. J. WELDON, M.D.,

Denver, Colo.

Although varicocele of the spermatic cord may be thought of as being a trivial ailment, and the treatment for it a simple and easy procedure, I doubt if there are many conditions more common and more troublesome to man than is varicocele. This being true, there are few conditions in the category of diseases which necessitate more careful consideration in treatment, whether it be palliative or operative.

I wish at this time to mention only a few facts in favor of the pubic incision, as I shall call it, in contradistinction to scrotal. Only a few years ago Bevan of Chicago discarded the scrotal incision for varicocele, and adopted and described the operation, using an incision made transversely just below the external abdominal ring. And although I am convinced that an incision made transversely one inch lower than his, in

the average adult, or more accurately, about one-half inch above the anterior origin of the scrotum, is preferable, yet he certainly deserves credit for the idea of going in above.

With an incision one to one and one-half inches in length made transversely with the spermatic cord, just above the anterior origin of the scrotum, the operator has access to any varicocele of the cord and the great majority of hydroceles of the cord and testicle. Because of the incision being so close to the scrotum, one can stretch or dilate the canal of the cord sufficient to deliver a very large testicle or testicular mass, without injury to the patient; and, yet, the very fact that the incision is made in the firm, unchanging skin of the pubes, and not in the loose, changeable scrotal tissues, seems to be responsible for the avoidance of the an-

noying haematoma we are all more or less familiar with when the scrotal incision is used. When the pubic incision is employed, dressings are more easily applied and kept intact. In fact, the incision being so short, a collodion dressing is quite sufficient. Whereas, in the scrotal incision the collodion dressing is entirely impractical.

Again, our attention is called to the question of infection. Any place about the body where it is difficult to keep dressings intact is certainly more liable to become infected. This is particularly true of the scrotum, for it is not only difficult to keep a dressing closely and properly applied to the scrotum, but its position between the penis and rectum renders it doubly liable to infection.

The contracting and expanding condition of the scrotum, its rugosity, and its liability to infection render union very slow and uncertain and hinder the wearing of a close fitting suspensory very soon. Since I have been using the pubic incision, the patients

are able to be on their feet and about in from five to seven days, while when using the scrotal, most all were compelled to remain in bed at least two weeks, either from more or less haematoma, slight infection, or poor union, and sometimes all three conditions combined.

Therefore, the point in favor of the pubic incision are as follows:

1. We can absolutely avoid haematoma of the scrotum.
2. We can do the operation with a shorter incision.
3. There is much less danger of infection.
4. Union of tissue is more rapid and certain.
5. Dressings are more easily applied and maintained intact; collodion dressings used.
6. Suspensory can be used following operation.
7. Patient up and able to resume occupation in one-half time following usual operation.

CLINICAL LECTURES AT ST. ANTHONY'S HOSPITAL.

F. M. McCARTNEY, M.D.,

Denver, Colo.

Tuberculosis of Kidney.

Mrs. T. Age, 31. Housewife.

Family History. Mother died at the age of 26; dropsy and heart failure. Father living; fairly well. One brother living and well.

Childhood. Measles, mumps, whooping cough and chicken-pox. Always had tonsillitis until tonsils were removed at the age of 13 years. Good recovery from all.

Past Illness. At the age of 17 years had inflammatory rheumatism and was confined to bed for three months. Thinks that her heart was affected from this attack; never has had recurrence; has been doctored for hart

trouble, though, from time to time ever since. One year ago last December had pneumonia and was confined in bed three weeks. Recovery was good.

Between the age of 27 and 28 had a bad attack of appendicitis; six months later had another attack, and another three weeks later. Then again after a period of eight months felt another attack coming on and had the appendix removed. Was in the hospital seven weeks; recovery was uneventful.

Menstrual Period. Began to menstruate at the age of 14 years. The periods were always easy up to the time of the appendectomy, but since that time

have been painful. Periods have been regular expect during pregnancy. Has borne two children; both living and doing well. Has had intense headaches at the menstrual periods since the appendectomy.

Present Illness. Eight years ago was told that she had a floating kidney. This was after childbirth. For the first two years only had two attacks, and after this the attacks began to come as often as two or three times per week. During the eight years she took a great deal of morphine; always noticed that the least lifting or straining brought on one of these attacks.

Laboratory Findings. The urine from left kidney was normal; nearly all pus from the right; no tubercle bacilli found. Tubercular test on patient was positive.

Comments and Operation. This case was admitted to the hospital January 29, 1912, with a tumor mass in right epigastric region, a temperature of 103°, with severe pain in right side in region of kidney and extending down toward pelvis. On following day was submitted to an operation and kidney opened and drained.

Now this patient got relief from this operation, but she was not cured of the tuberculosis of the kidney. Could we have ascertained at the time of this operation that the left kidney was doing all the work, we would have removed right kidney at that time instead of draining it. But this patient was in no condition to undergo an examination that we might ascertain how much work the left kidney was doing, as she had an immensely dilated kidney at the time with an obstruction of the ureter. This obstruction was not due to a stone, but was apparently due to a plugging of the ureter with tuberculous pus. This patient has since improved, and we have subjected her to an examination to ascertain how much work the left kidney was doing and if there was any evidence of dis-

ease. This we learned by catheterizing the ureters. On the right side we only got a few drops, which was nearly normal urine; the catheters being left in about twenty minutes. Now this patient is not in the best condition as you can see, so we will remove this kidney under nitrous oxide and oxygen, as they claim there are no blood changes or shock following the use of this anesthetic. Dr. Parsons will administer the anesthetic.

Now you can see the scar and sinus following the last operation. We will go down through the old scar and locate the kidney; we are now down on the kidney and find a great many dense adhesions, which we will have to break up; then we will deliver the upper pole of the kidney. It is very difficult to remove a kidney by delivering the lower pole first. Now we have the kidney up, and we see here a large dilated pelvis; we dissect out the ureter, artery and vein in as small a mass as we can. I have a clamp here that clamps almost at right angles, and I crush the pedicle and tie in the groove made by the clamp by passing my ligatures through the middle of the mass and tying each way, then tying clear around it; then cut the pedicle above the ligature, leaving a good stump. We will place a small drain in this case and she will drain for months. This drainage is prolonged by leaving in a diseased ureter, but it is better to leave it in and let the patient drain than to subject her to a removal of ureter.

Remarks by Dr. Parsons. You see the patient is now awake in just a little more than a minute after the anesthetic stopped, as is usual with nitrous oxide and oxygen. Her pulse has never changed during the operation.

The patient made an uneventful recovery.

A Dissecting Ulcer of the Bowel.

Mrs. P Age, 28. Housewife.

Operation about two years previous

for double pyosalpinx and appendix removed at the same time. Made an uneventful recovery.

About one year afterward, complained of pain in the region of the rectum, extending up into the posterior cul de sac, and painful defecation, and at times passing large quantities of blood. The symptoms becoming more aggravated, she was sent to the hospital and under ether anesthesia I found a small fibroid in the posterior wall of the uterus, and a large mass the size of a navel orange a little above the posterior cul de sac. On opening patient up, dissecting down through quite dense adhesions, found the tumor, which I first thought was a solitary cyst; trying to dissect it loose from its bed, it ruptured and quite a large quantity of black blood and fecal material came out. After dissecting the mass loose, we found it to be the first portion of the ileum. I then resected about eight inches of this diseased portion of the bowel, doing an end to end anastomosis by the ligature method, throwing the omentum down over the line of union, so as to wall off any leakage which might occur from the general abdominal cavity. Drainage was

instituted for 48 hours and then removed.

Patient made an uneventful recovery.

The section of the bowel which was removed showed an ulcer, which had eaten its way through the wall of the bowel to the peritoneal coat and then allowed the blood and liquid fecal material to dissect up the peritoneal coat, forming a tumor the size of a large navel orange. This pathological specimen shows how persons can go around about their business and their life hanging by a thread without much physical suffering, for had this bowel ruptured, being in the position it was and not being completely walled off from the general peritoneal cavity, it would probably have cost her her life unless she was where she could have been properly handled at once. Taking into consideration what the previous operation had been, it would have made the diagnosis very difficult.

The symptom which worried the patient the most was the hemorrhages from the bowel, the pain at the time and for a period after the bowel movements.

LOCAL ANAESTHESIA BY THE INFILTRATION METHOD IN MINOR AND MAJOR SURGERY.

O. S. FOWLER, M.D.,

Denver, Colo.

Since the discovery of ether in 1846 by Morton, and chloroform in 1847 by Simpson, and nitrous oxide by Wells in 1884, surgical operations have been made relatively very safe and comfortable, and have made possible the wonderful achievements of surgical endeavor. The reported mortality from these agents is extremely low, almost a negligible quantity, yet we must believe that there are many fatalities that are directly due to the anaes-

thetic that are not reported, and these are occurring in every nook of the world; e. g., Dr. C. G. Parsons, expert anaesthetist, of this city, has kept a record of all deaths coming to his knowledge in hospitals of this city in the past eight years. During that time thirty-five deaths have been recorded by this observer. I have estimated that during that time 40,000 anaesthesias have been administered, allowing 1200 as the yearly average for each of the

three largest and 1400 in the others annually. This would give a mortality of one to each 1150 administrations during the course of the operation and not due to the gravity of the operation. If to this we add those cases of death due to complications directly traceable to the anaesthetic, such as most post-operative pneumonias, anaesthetic shock, urinary suppression and fatty degeneration of the liver, regardless of the morbid conditions recently claimed to follow in the wake of these drugs, we are forced to the real dangers to the patient as being well within the small percentage column of each one hundred cases. However, these figures are not sufficiently classified to be accepted as final, but they are approximately correct, which figures are really quite astounding, for we usually assure our patients that there is practically no danger in such and such a procedure, or that the only danger is in the anaesthetic and that is so slight as to be negligible; all of which, we must admit to ourselves is entirely too sanguine.

During the last decade there has been no phase of surgical progress so notable or so important as the advancement made in the use of local anaesthesia in both minor and major surgery, and I feel that American surgeons have not kept up with those of Continental Europe; and I also feel that the profession of this region is still slower in the adoption of the method. To be sure of this, you need only to go over the records of our hospitals for a short time to be convinced of that statement. I will venture to assert that fully 25% of all work could be done in this manner if only the surgeon would perfect himself in the technique of the method, and unbiasedly present the relative advantages to his prospective operative patients, and too, in such a manner as to convince the patient that he could do it, thus relieving his fears. I dare say that very few cases where it was ad-

vised would refuse to have the operation by the safer method.

Local anaesthesia was really introduced by Koller in 1884, with cocaine upon the mucous membranes, yet cocaine has had a good many fatalities, most of them previous to the additional use of adrenalin and when it was used in stronger solutions. This is true of all anaesthetics, locals as well as general, and the recent step in the former is to use weaker solutions all the time, and too there has resulted a more uniform method of administration; e. g., all, or nearly all use the weakest solution in the skin, and only slightly stronger in the deeper tissues; however, some yet use very strong solutions in the skin, as much as 4%. This we believe to be entirely wrong, for it is possible to anaesthetise the skin with pressure infiltration of sterile water, and besides the more of the drug you use in the skin the less you are free to use in the deeper tissues.

At the same time the field of local anaesthesia has been widened from minor operations to many of the most difficult operations in surgery. The skull has been trephined and the brain examined, explored or operated on. The kidney has been anchored or removed; the abdomen has been opened, explored, or its organs operated; e. g., gastro-enterostomy, intestinal anastomoses and resections, gall stones removed or the gall bladder drained, appendectomies, herniotomies, the urinary bladder opened and stones removed; thoracotomy. These have all been done many times, and it is surprising how easy some of them are to accomplish. Fingers and toes are not difficult to do anything necessary upon; also the hands and feet, and the whole limb can be handled very satisfactorily by intravenous method as developed and used mainly by Bier. The breast may be amputated, but the glands of the axilla are difficult to completely re-

move. After such an array of difficult operations it is almost useless to mention those minor ones, as circumcision, varicocele, orchidectomy, lipomec-tomy, sebaceous cysts, nevi, warts, moles, removal of glands for examina-tion or cure. In fact, we would have to enumerate the whole list of surgical procedures, that may be done, either from indication or from choice.

Yet how often do we see a general anaesthetic given for almost the sim-plest of all minor operations. I wonder if at times it is not done to magnify the importance of the procedure, or even I am inclined to suspect that the finan-cial side creeps in. I recall seeing a man given ether for the opening of an abscess which had already burrowed almost through the skin. It was simply punctured and a small gauze wick in-serted, a wholly simple procedure. My curiosity impelled me to ask if it could not have been opened under a local anaesthetic; and I was astounded to hear his reply—"Sure, but had I done it that way, I could not have charged him more than \$15.00 or \$20.00, while this way he is willing to pay \$75.00 or \$100.00.

However that may be, I feel that we owe it to our patients and to ourselves to surround each patient with every safeguard possible, that we owe it to them to give sufficient of our time to make it the safest operation possible for the relief of the difficulty; I mean that even if it should take a little longer to do an operation under local anaes-thesia, we should select that method. We cannot honestly offer the excuse that we are too busy, for there is not one of us who could not do twice as much as we are doing, and yet have time for recreation. I am very sure that it requires more skill, patience, gentleness and deftness in dissecting, to operate under local anaesthesia than under general. I am also very sure that under general anaesthesia there

is too much rough and unnecessary handling of the intestines; that they are unnecessarily pulled upon, and other structures maltreated by hurried operators, who are working for one end only, that of reducing the time of operation—almost the least important thing in the vast majority of cases, it certainly does make a difference when the extra time is expressed in hours or half hours, but not any difference when only a few minutes are gained at the expense of gentleness with the tissues or thoroughness in investigation of re-lated or adjacent structures. The day for the slam-bang, cursing piratical surgeon is past, whose skill was judged more by the size of his biceps or his ability to swear in seven languages, than upon his equilibrium of temper and tenseness of his mental concentra-tion—who is able to do, as we have seen in certain clinics, from three to eight major operations every day of the week and month and for ten months of the year, and not get tired or turn the op-erating room upside down.

The operating room must be conduct-ed differently, there can be no foolish questions asked, each assistant must know your technique and give every possible aid without having to be di-rected, the tissues must be handled carefully, no retractor is to be yanked or pulled upon, unnecessary noise of in-struments must be avoided. The pa-tient may be diverted by interesting conversation and his mind given reas-surance at all times. Convince him that it is not necessary nor desirable for him to endure any pain; that if he has a twinge he shall tell you, and that you can and will remove that chance. You may be able to proceed with the opera-tion for a long way before he is aware that you have begun, provided you are not trying to operate as you do under general anaesthesia; that you do not lose your temper and thus destroy the patient's confidence, for even the little child soon learns that the real master

does not resort to seeming violence to control a situation.

Indications: With every new thing proposed there is always opposition offered, and too often the objection is made, perhaps unconsciously, because we cannot do that thing ourselves or because of prejudice. This, as in everything else, the individuals must be taught its advantages, and how slow it is at times. There has never been, we believe, so much said, and written upon any one subject, as upon appendicitis, and yet today approximately one-half of the cases are ruptured before being brought to the operating table.

To put it concisely, I would say that local anaesthesia is indicated in all cases where the necessary operation and examination can be done. It should be remembered that a general can always be given if you are unable to finish under a local; in this way you will be at least able to reduce the time of anaesthesia by half in bad cases. You can do considerable manipulation, inside the abdomen, if you do not exert more pressure upon the organs than they are accustomed to from the usual intra-abdominal pressure while we are lifting or straining; and this is sufficient, these examinations can be made from the usual incisions. The method is especially indicated in the aged, and is a gift to those suffering from herniae, who have preferred to suffer rather than to try the risks and discomfort of general anaesthesia, and it will be used more in these for gall stones; also indicated in advanced or active cases of tuberculosis, or in arteriosclerosis, or in low kidney function and in certain heart lesions—compensated valvular lesions do not contraindicate general anaesthesia. Locals should always be used in phlegmonous abscess in the neck of fat people, for they are certainly very bad risks under general. Where the infiltration method is not satisfactory, the intravenous

method may be used instead satisfactorily.

I have used it with good results upon children as young as seven years for circumcision, and in one case, circumcision, in a child eighteen months old. The child did cry, but his crying bore no relation to the work, for he was perfectly quiet while suturing, and cried at times when nothing was being done. I have used it in herniotomies in nervous Jewish men, without a previous opiate. I have also used it in inguinal and femoral hernia in women, both of whom had been previously operated for other things with a general anaesthetic and one with an unsuccessful local anaesthetic, both as to anaesthesia and to relief, and each asserted afterwards that if it were necessary for another such operation that she would select the local without hesitation. I have operated one side of a double hernia, in two instances, and then asked if they wanted the other one operated at once, and they both said to go ahead. It is a great pleasure to have a patient eat his breakfast, then be brought to the operating table, have a major operation done and be taken back to his room and eat his lunch, and to know that outside of the local trauma, he is fully as normal as when he came to the operating room.

I am convinced that the personal equation of the surgeon is a considerable factor in preparing the patient mentally for the procedure, and to hold his confidence during the operation. I am also convinced that the doctor is often responsible for nervous, fidgety, worrying patients, in that they may show undue alarm or make unnecessarily bad prognoses or give the patient too much personal attention, or encourage frequent repetition of their various real or supposed ills. These all tend to unfit the individual for any exhibition of strength of character.

Methods of Administration: Local anaesthetics are used mainly in three

ways: (1) By infiltration of the tissues without regard to nerve trunks, but to inject enough of the solution so that the nerve endings and the smaller nerve trunks will be sufficiently anaesthetized, both from pressure and from the drug. This has been criticised that it may cause sloughing, I can say that the only sloughing I have ever seen was in one case only, due to too much adrenalin solution being used in the skin. (2) By blocking the nerves that supply the region of operation, with or without infiltration in the immediate region. I rely very much upon blocking the nerve trunks whenever practicable, and I use the weak solutions instead of the very strong ones previously advised, for a 0.5% solution is just as effective, if properly injected, as a 4% solution. (3) The intravenous method, as used more by Bier to date. First, get all the blood out of the limb by a spiral elastic Martin bandage from the distal portion, then apply a tourniquet at upper portion, then remove the spiral bandage, place another tourniquet several inches below the upper one; or if you desire to operate at the extreme portions, the second tourniquet may be omitted; then open a superficial vein and inject as for intravenous salt solution, from 100 c.c. to 200 c.c. of 0.5% novocaine, without adrenalin against the valves. In fifteen minutes, go ahead; when through, remove the tourniquets gradually to prevent too rapid absorption. Bier reports its successful use in 135 cases. The method is a good one and to be used where local infiltration is not sufficient. Some men recommend a tourniquet in each instance, where it can be applied; e. g., at the root of the penis in circumcision; this is necessary if you do not use adrenalin with the solution, to prevent too rapid absorption. The amount of anaesthetic that can be safely used depends upon the rapidity with which it is injected and the rate of absorption. If the injection covers a period of from a

half hour to an hour, you may safely use much more, perhaps more than twice as much as if you injected all parts before beginning the operation. In this manner a part of it is lost from the tissues, more of it has been oxidized by the tissues, and now you can inject more at any time you desire. Some men endeavor to inject all at once and then hurry through the operation; personally, I prefer to inject only a part, if it is a major procedure, and proceed as far as injected, then to inject more as that region is passed. I appreciate that this lengthens the time, but I am sure that it gives a more satisfactory result in every way, as better anaesthesia may be obtained by the greater amount you are able to use. Of course, with smaller operations the entire area is injected at once. It is my custom to inject a double row of wheals in the skin, and then make the incision between them. In this manner the skin is still nicely anaesthetised at the end of an hour or longer. There is no pain in the visceral peritoneum, but pulling upon the omentum or mesentery gives much pain and this must be avoided; it is better, if necessary to enlarge the incision. Bones may be drilled, chiseled or cut if the periosteum has been anaesthetised or removed. The brain itself is without pain, and operations of some magnitude can be done upon it with local anaesthesia. I feel that any patient may be so convinced of its advantages, that he will select the local, provided the situation is put to him in the right light, and that consciousness while being operated upon is not nearly so objectionable to most normal individuals, as the most unpleasant knowledge that you are losing consciousness with a general, with the ever present thought that you may be the rare case that does not recover from the anaesthetic; and too, you can assure the patient that the local will remove practically all dan-

ger from the operation, which is the most desired thing in surgery.

I am sure that its lack of more general adoption is due to the fact that too many physicians and surgeons are not thoroughly conversant with its application in major surgery, or are simply prejudiced against it and do not perfect themselves with its technique. I am glad to note that the nose, throat and eye men are using it much more regularly, and I am told by them with uniformly good results and satisfaction.

The choice of the anaesthetic is, to a large extent, wholly a personal question. Cocaine has been the sheet anchor for many years, but is undoubtedly more dangerous than either novocaine or quinine and urea. Novocaine is reputed to have only one-seventh the toxicity of cocaine, but much of this is based upon the early statistics of cocaine, when it was used without the additional safeguard of adrenalin. Personally, I use novocaine entirely, in 0.5% and 0.25% solutions with nine drops adrenalin 1-1000 to each 100 c.c., and find that they answer every demand, and if I do not get perfect anaesthesia, I feel that the fault is mine in the administration and not in the drug. Quinine and urea I regard as a very good anaesthetic, when used in weak solution, but do not use it because I was familiar with novocaine before the latter was in general use, though it has the advantage of continued anaesthesia, which is desirable in many but not all cases.

There are certain operations in which a general anaesthetic is distinctly contra-indicated, regardless of the heart and kidneys. One is in pleural empyema; here a general anaesthetic is given in nearly all cases, and much damage is usually done by the uncontrollable coughing as the patient is recovering from the anaesthetic, while with a local this can all be obviated. It has been shown that the frequent

cause of sudden death in these cases is due to an embolus being loosened on the pulmonary side. The chance for this is very greatly increased when the lung is forced suddenly against the chest wall in coughing severely, and we have all seen the fluid spurted across the room from the coughing under general anaesthesia. The technique here is very simple: locate the point of entrance, usually the eighth rib in the axillary line, make a wheal upon this rib at each end of the proposed incision and inject the interspaces above and below; wait about ten minutes and cut down to the periosteum; now take a curved needle (I have devised a special one), and slip it under the lower border of the rib and inject into or close around the nerve itself, and into the space between the rib and the parietal pleura. Now, while you are waiting for this to take effect, go back and tie blood vessels or spin a yarn ten minutes long, for the benefit of the patient. You may now incise the periosteum along the middle of the rib and raise it up on both its surfaces with appropriate periosteotomes. You now place the rib-cutting forceps as usual and remove the entire rib for one and a half inches. You can now open into the pleura at once and drain it rapidly, or you may drain it more slowly with a syringe or needle. Close the wound in the usual manner after inserting the required size of drain.

I have now used local anaesthesia by the infiltration method in over two hundred cases, and have found it without danger or bad effects. These cases include 33 herniotomies, seven varicoceles, four hydroceles, seven resection of ribs, exploratory incisions of abdomen, appendectomy, external clamp on fractured bones, nerve anastomoses, suprapubic cystotomies, orchidectomies, amputations, skin grafting by the Thiersch method and with whole thickness skin, wiring of fractured patellae, removal of large lipomata, circumci-

sions, plastic operation on penis. I have resected large portions of omentum during hernial operations and have used local anaesthesia for the removal of various foreign bodies, and the repair of numerous accident wounds of various kinds. These, along with its use in other less important procedures, have convinced me that it may, in a great measure, replace general anaesthetics, thereby increasing the safety of our patients, without in the least adding to difficulties. In only one case, hernia, was there any post-operative difficulty, that of obstinate intestinal paresis, and that was due to resection of a large amount of omentum. I have not felt or found that excessive fatness was a contraindication to a local; I operated one man weighing 250 pounds, who had an immense scrotal hernia. All wounds have healed readily by first intention, except two in suprapubic op-

eration on badly infected bladder in old men; yet this cannot be said to be due to the anaesthetic, for we get this under similar conditions with general anaesthesia.

This method of operation is bound to grow in importance as its advantages are appreciated and surgeons perfect themselves in the technique, and use it from choice instead of compulsion as often as possible. I can say that I have found much more difficulty in convincing the members of the profession of its advantages, than I have had with operative patients. In fact, it has been gladly accepted in nearly every instance in which it has been advised. The method undoubtedly has limitations, but these limits are away beyond where it is being used today in any part of the world.

624 Metropolitan Building.

MEDICAL PROGRESS

The Benzoic Acid Bogy Fading Away.—The time is very recent when opposition to the use of sodium benzoate or benzoic acid as food preservatives served as a shibboleth of medicopolitical regularity, and it was quite the custom for medical societies, at the dictation of the would-be autocrat, to denounce the employment in foods and drinks of these chemicals. But truth even when sat upon will usually manage to get up after a time, and it is no wonder that the public in general are coming to view the matter in much the same light as do real chemists and physiologists, such as Long, Remsen and Chittenden, as will be seen by the following quotation from *The Independent* of Nov. 7th: "Extensive experiments made by V. Gerlach, of Wiesbaden, confirm the results obtained by the Referee Board as to the harmlessness of benzoic acid and sodium benzoate, and discredit Dr. Wiley's ruling against it as a preservative for food. The author, experimenting upon himself, took as much as 10 grams of benzoic acid within 3½ hours without producing any noticeable effect upon respiration, body temperature, digestion or general condition. This is about the amount which would be used to preserve 30 pounds of meat or other food, so if a person did not eat more than that amount of benzoate food at one meal he need not be afraid of it. In tests upon the contents of his own stomach he found that the addition of benzoic acid to his breakfast did

not alter the strength of the gastric juice or interfere with the digestive process. Daily doses of a gram of benzoic acid were given to men for periods ranging from one week to twelve without in any way affecting their health. This is more than any person would get unless he lived exclusively on preserved foods and was a hearty eater at that. How much benzoic acid a man could take without injury to his health was not determined but it must be very great, for in experiments on rabbits as much as one part per thousand of body weight was injected into the veins every day for twelve days without causing loss of weight or affecting the pulse, temperature or respiration. Since this method of administering the dose directly into the blood is more potent than taking it with food, this experiment would indicate that a man might safely take about 2½ ounces a day, though it would be risky to take more than five ounces. So it would to take five ounces of common salt every day. In fact, injections of sodium benzoate into the suspended hearts of frogs, cats and rabbits were found to produce less effect than solutions of common salt of equal concentration. It seems, then, from these and similar experiments that we have in benzoic acid a preservative as harmless as salt and considerably more useful, since it is tasteless and much more effective in preventing decay. If so, it is very important that the fact should be generally known, in order that the popular

prejudice that has been aroused against it should be removed, for a safe, cheap and tasteless preservative would contribute greatly to the conservation of the health and wealth of the nation. The paper referred to is abstracted in the Experiment Station Record for September, 1912."

Significance of Nucleoalbumin in Urine.—Nucleoalbumin is essentially a normal urinary constituent, says J. Bergen Ogden (Medical Record, Nov. 16). It is readily distinguished from true albumin by salting the filtered urine with one-sixth its volume of saturated solution of sodium chlorid and then heating the upper portion of the specimen—albumin is precipitated, nucleoalbumin not. The amount of nucleoalbumin is increased whenever the genitourinary mucous surfaces are irritated or stimulated (local injury, overexertion, chloroform inhalations), and its quantity is usually greater in the urine of the new-born and in the female of the species. Nucleoalbumin (not mucin) threads are most prominent in the urinary sediment during the late stages of gonorrheal urethritis, catarrhal disturbances of the bladder, and in the urine of a girl or woman who has leucorrhea or some mild inflammatory condition in the genital tract. The so-called cylindroids (more properly, mucoids, according to Ogden) are, like the threads above mentioned, in reality mucoids or nucleoalbumin in insoluble form. They are commonly found coming from the prostatic ducts. "Probably their most common occurrence is in very mild catarrhal conditions of the neck of the bladder, and then they are usually accompanied by an excess of leucocytes and an occasional free red cell" Concerning albuminuria due to disturbances below the kidneys, Ogden says: "By far the most frequent causes of a small amount of albumin in the urine of a male in the first class are very slight irritation in the urethra, at the neck of the bladder and in the bladder, such as may be seen many months or years after a gonorrheal infection, and after the elimination of a highly concentrated urine for several days. In the female, the presence of vaginal secretion, in which there is almost always a small amount of free blood, may lead to the presence of a small amount of albumin in the urine."

Differentiation of Cholelithiasis and Appendicitis.—This procedure is especially difficult, says Ewald (October American Journal of Gastro-Enterology), in appendicitis larvata or when the appendix points upward towards the liver. Inflation of the intestines per rectum may cause them and the appendix to change position, the latter sometimes becoming palpable. Leucocytosis points in favor of suppurative appendicitis and against gallstones, though empyema of the gallbladder (palpable tumor) may also show leucocytosis. Renal and ureteral pains are localized and radiate outward and backward, and may be accompanied by hema-

turia. Floating kidney is replaced into the diaphragmatic excavation when the colon is inflated. Icterus along with enlargement of the gallbladder, indicates cancer of this organ; intermittent jaundice with contracted gallbladder points to cholelithiasis, though the gallbladder may be enlarged in simple gallstone trouble.

Mercury Plus Salvarsan.—Robinson (October Critic and Guide) prefers to give salvarsan in small doses frequently repeated, and alternate the salvarsan injection with mercury—either intramuscularly, internally or by inunctions.

Prevention of Late Poisoning in Chloroform Anesthesia.—The editor of the New York Medical Journal suggests as a prophylactic measure having the patient, as soon as he is sufficiently awake, inhale and exhale freely for a few minutes at a time, so as to cause the rapid elimination from the air cells of the chloroform brought there in the blood, which makes a complete circuit of the body in 26 seconds.

Treatment of Vesiculitis and Sexual Neurasthenia.—C. C. Seabrook (October Wisconsin Medical Recorder) begins with either the vibrator or the high frequency current. One should use the long rubber rectal attachment with the vibrator, slowly and gently inserting the vibratode to not much above the prostate gland, making the application for five to seven minutes. With the high frequency glass electrode inserted into the bowel (protecting the nates from sparks), use a spark gap of from one-half to four inches for five or at most ten minutes. If there is a sense of depression next day, the seance was too long. Dr. Seabrook alternates these two methods, giving a treatment every other day. He claims that he has never had to employ more than six or eight treatments.

Differential Diagnosis Between Pyloric Obstruction and Gastric Atony.—Theodore Hausman (quoted editorially in the Lancet-Clinic, Nov. 2, 1912) has for the past ten years used a test which depends on the retention over night of starchy food in the organically obstructed stomach. In the evening patients are given a supper of barley or rice gruel; twelve hours later the stomach is aspirated with the patient reclining. The aspirated fluid is allowed to settle and a small quantity of the sediment is mixed thoroughly with a few drops of Lugol's solution. The mixture is then put in a test-tube, and enough water is added to render transparent. On inspection in a clear light, starchy material can be readily detected as dark blue particles floating in the liquid. If starch is thus revealed macroscopically, organic obstruction is surely present. Microscopically starch can be frequently detected in the aspirated fluid in constitutional asthenia and in gastric atony depending upon constipation.

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TECHNIQUE.

A good surgeon is known by his technique; that is, by the faultless facility with which he proceeds from step to step of preparatory and operative measures. Not to mention any names of living skillful surgeons, with whom Denver is pre-eminently favored, all of us who have seen Clayton Parkhill operate recognized his graceful superiority in this respect.

The technique of the laboratory, as well as the operating room, is a thing to be learned by long and careful drilling, so that "every little movement has a meaning of its own," each article of use is in its appointed place, and the routine of a test or of an operation becomes almost automatic. Consider how long it would take a man to dress himself if he had to reason out each time

the end and object of this button and that article of apparel, instead of doing the thing with scarce a conscious thought. Just so our handicraft should become as spontaneous as walking or breathing, leaving the mind wholly free to exercise itself in observation and judgment.

The men who have entered practice in the past 35 years, particularly those who have had a practical training as hospital internes, have a great advantage over their older confreres in the matter of ingrained aseptic technique. No matter how well informed in surgical matters, nor how able in diagnosis, these preaseptic graduates may be, there always lurks the liability to bite off the silk thread with the teeth or to reach around to the hip pocket for the plug of tobacco there ensconced.

PERSONALS

By the Editor and Associate Editors.

Dr. G. H. Stover is back from his trip to Honolulu.

Dr. S. Eachberg spent the holidays in New York City.

Dr. Bixler, of Erie, was a recent visitor in Denver.

Dr. and Mrs. Fosdick Jones are enjoying an outing in California.

Dr. Condon, of Breckenridge, Colo., was a recent visitor in Denver.

Dr. and Mrs. Thomas H. Hawkins send Xmas greetings from Rome.

Dr. John G. McFadden of Loveland was a visitor in Denver, Dec. 14th.

Dr. Horace P. Holmes of Sheridan, Wyo., has suffered a paralytic stroke.

Dr. Allen Harris has been spending some weeks in Arizona for his health.

Dr. J. M. Perkins is now settled in his new home at 1301 Clayton Street.

Dr. R. W. Corwin recently reviewed surgical subjects at the Mayo Clinic.

Dr. H. H. Abbott, of Monte Vista, was in the capitol city just before Christmas.

The Walsenburg schools have been closed because of an epidemic of scarlet fever.

Dr. W. N. Wishard, of Indianapolis, visited Dr. and Mrs. R. B. Dibble, of Pueblo recently.

Dr. F. A. Burton is taking a well earned vacation with his family in Southern California.

Dr. and Mrs. H. R. McGraw have moved into their new residence at 165 Franklin Street.

Dr. A. B. Patton, of Chicago, was a guest in December of Dr. Walter Bronson, of Pueblo.

Dr. and Mrs. Fred Baker of Palmer Lake have gone to Bloomington, Ill., for the winter.

Dr. and Mrs. Frank Finney, of La Junta, visited their daughter in New York City last month.

Dr. and Mrs. C. F. Stough are home in Colorado Springs, after six months' sojourn in Europe.

Dr. Lucas of Idaho Falls, Idaho, was recently operated on for appendicitis at St. Anthony's Hospital.

Dr. William H. Peltier, one of our rising young practitioners, is now located at 436 Metropolitan Building.

Dr. W. S. Wood, an osteopathic physician of Denver, died of Bright's disease, Dec. 1st, at the age of 67.

Dr. Fred M. Heller, of the Weysell Hospital, Chicago, visited the folks at home in Pueblo during the holidays.

Dr. W. R. Hoch, a laryngologist of high standing who had practiced some years in Denver, died on the 9th of December.

Dr. N. A. Johanson of Seattle, with his wife and little daughter, was visiting friends in Denver during the Christmas week.

Dr. and Mrs. D. G. Monaghan are on the way to Europe. The doctor will take a six months' postgraduate course in Vienna.

We regret to learn that Dr. E. O. Sisson is still kept at home by sickness, and hope that he may soon be able to go about.

Dr. W. A. Bogart, president of the Twentieth Century Club, sent each member felicitations upon a tasteful Christmas card.

Dr. L. E. Rupert of Florence is home again and hard at work, having recuperated by a visit of several weeks in old Virginia.

Dr. and Mrs. O. M. Gilbert left Vienna, November 28th, and are expected home in Boulder in time for the Christmas festivities.

Dr. Erle F. Smith, recently of the Minnequa Hospital staff, has gone to Topeka to take a position in the Santa Fe Hospital.

Dr. Mark Millikin of Hamilton, O., an old friend of Dr. Leonard Freeman, spent a few days in Denver in the second week of December.

Dr. R. F. Darnall, assistant superintendent of Woodcroft Sanitarium, Pueblo, has been taking a special course of study in New York City.

Dr. Nicholas Wood spent the month of November very pleasantly in southern California, motoring and eating strawberries and watermelons.

Dr. Maurice Kahn of Leadville attended the meeting of the Western Surgical Association held in Cincinnati in the third week of December.

Drs. Hall, Black, Freeman, Lyman, Coover and Levy have cards out for their usual New Year's treat to the medical profession of the city and state.

Dr. Wm. R. Hoch, an old time practitioner and graduate of the University of Pennsylvania, 1880, died in Denver during December of meningitis.

Dr. W. W. Wilkinson, formerly of Silverton, now located with his family at Phoenix, Ariz., likes his present field of endeavor, and is doing well.

Dr. T. L. Carmody gave an interesting paper on "Cleft Palate," illustrated by stereopticon, before the Pueblo County Society on December 19th.

Dr. J. N. Hall delivered the address before the graduating class of nurses from Park Avenue Hospital, at the Woman's Club, on the evening of Dec. 11th.

Dr. and Mrs. Leonard W. Ely charmingly entertained a large number of their friends at a song recital on the evening of Dec. 20th at the Denver Country Club.

We understand that a public morgue will be built near the county hospital, largely from material derived from tearing down buildings for the Civic Center.

Diphtheria has appeared in epidemic form among the inmates of the insane ward of the Denver City and County Hospital,

28 cases being reported up to December 21st.

Dr. John L. Schwer, a Minnequa Hospital physician, was married to Miss Georgia Isherwood, Nov. 28. The young couple will make their home at 208 Bradford Street, Pueblo.

Another Christian doctor is needed for the Good Samaritan (Methodist Episcopal) Hospital at Guanajuato, Mexico. Communications may be addressed to the director of the hospital, Dr. Levi B. Salmans.

Dr. Mary E. Bates has been appointed national chairman of the School Health Committee, School Patrons' Department of the National Educational Association. A better selection could not have been made.

That live and growing institution, the Boulder-Colorado Sanitarium, graduated sixteen nurses from its training school on the evening of December 19th. Dr. H. A. Green, the superintendent, conferred the degrees.

Dr. W. H. French, who had practiced his profession many years in Denver, died of cerebral hemorrhage, Dec. 7, in Los Angeles, whither he had gone two years ago for his health. He is survived by a widow.

Dr. H. G. Wetherill and Dr. F. H. McNaught attended the Western Surgical Association meeting in Cincinnati during the third week of December. They also visited the Mayos and stopped over a day in Chicago.

Dr. E. C. Baldwin of Westcliffe died suddenly, Nov. 26, at the early age of 36. He was the only practicing physician in the Wet Mountain Valley, and two years ago was elected to the state legislature from Custer County.

Dr. W. N. Wishard of Indianapolis addressed the Medical Society of the City and County of Denver, at the last meeting of last year, upon the subject, "Some Considerations of Surgery of the Prostate." Dr. Wishard is an old friend of President Davis.

Dr. W. N. Wishard, of Indianapolis, and Dr. T. E. Carmody, of Denver, gave addresses before the members of the Pueblo County Medical Society, December 19th, at the home of Dr. R. B. Dibble. The lectures were instructively illustrated by means of the electroscopes.

Drs. Benjamin H. Matthews and W. M. Wilkinson held their third annual meeting (for men only), Christmas morning, at 468 Metropolitan Building. The attendance was large, the proceedings were exhilarating, and every one who came departed feeling like a Christmas tree.

A woman physician is needed for the Mary S. Ackerman Hoyt Hospital and Dispensary for Women and Children, Ghansi, India. For further particulars write to Mr. Wilbert B. Smith, Candidate Secretary, Student Volunteer Movement, 125 East 27th Street, New York City.

The December monthly luncheon of the Denver County Society was much the most

enjoyable of any up to date. Father O'Ryan was the orator of the day and kept his auditors continually laughing at his coruscating quips and anecdotes illustrating his subject, "Irish Wit and Humor."

Dr. Alexander Coleman, who was forced by ill health to give up his practice in Rocky Ford and to go to a lower altitude, has been in Selma, California, for several months. He is reported to be much improved in health and expects ere long to return to Rocky Ford, and to resume his work.

The Denver Advertising Men's Association are conducting a campaign against fake advertising and misrepresentation. This has nothing to do with a certain class of doctors who are adepts in obtaining a lot of notoriety and advertising and not paying for it; of course, if they paid for it it would be "non-ethical."

Dr. G. W. Harrison, who lives part of the time in Los Angeles and also Denver, has filed suit in the district court at Albuquerque, N. M., for \$197,000 against his father. The suit is the outcome of alleged fraud in the settlement of an estate left by Dr. Harrison's mother, who was a member of a very wealthy Spanish family.

The American Institute of Homeopathy will hold its annual convention in Denver, in July of this year. Several hundred of the leading homeopaths of the country will be in attendance. The local committee in charge of arrangements consists of Drs. Grant Peck, Rea P. McGee, E. B. Swerdfefer, J. B. Brown, J. W. Harris, C. D. Fisher and J. P. Willard.

The Department of the Interior proposes to spend \$16,647 on the Mesa Verde National Park during the fiscal year ending June 30, 1914. This park is situated in southwestern Colorado, and may be reached from Mancos. It contains many notable prehistoric ruins of the Cliff Dwellers, the principal and most accessible being Spruce Tree House, Cliff Palace and Balcony House.

The Otero County Medical Society met in La Junta, December 10th, and elected the following officers for the ensuing year: President, Dr. J. A. Lawson, of Rocky Ford; vice-president, Dr. H. O. Miller, of La Junta; secretary and Treasurer, Dr. A. S. Brunk, of La Junta; board of censors, Drs. L. P. Barbour, Rocky Ford; H. E. Hall and J. L. Kearns, of La Junta. Dr. Jessie Stubbs was elected delegate to the state convention.

In re the article by Arno Dosch in the January Pearson's Magazine, upon the Schafer Phylacogens, a perusal of the correspondence between President Frank G. Ryan, of Parke, Davis and Company, and Editor John Thompson, of Pearson's Magazine, shows conclusively that Mr. Ryan used every endeavor to persuade the editor to refrain from publishing the article in question, and that Parke, Davis & Co., are certainly blameless in the matter, if any blame there be.

**LARIMER COUNTY MEDICAL SOCIETY—
REGULAR MEETING DEC. 4, 1912.**

Annual Election of Officers.

Met in the Y. M. C. A. Building. There were present. Drs. Kickland, Hoel, Dale, Taylor, Replogle, Stuver and McHugh.

The minutes of the last meeting were read and approved. The society then proceeded to the election of officers for the ensuing year with the following result, viz.:

President, Dr. George L. Hoel; Vice-President, Dr. B. F. Replogle; Secretary, Dr. E. Stuver; Treasurer, Dr. T. C. Taylor; Censor (for 3 years), Dr. W. A. Kickland; Delegate to State Society, Dr. W. A. Kickland; Alternate Delegate to State Society, Dr. E. Stuver. Delegate and Alternate elected for two years.

The Board of Censors now consists of Drs. Replogle (Dec., 1913), Dr. Dale (Dec., 1914), and Dr. Kickland (Dec., 1915).

Dr. Kickland will read a paper on cystitis at the next or January meeting. Adjourned.
E. STUVER, Sec'y.

**REGULAR MEETING OTERO COUNTY
MEDICAL SOCIETY, DEC. 10, 1912.**

In absence of President and Vice-President, Dr. A. L. Stubbs was chosen President pro tem.

Minutes of previous session read and approved. On motion of Dr. J. A. Lawson the question of the fee for giving a course of typhoid vaccine was taken up. After considerable discussion a motion was made and seconded that the minimum fee for such a course including the vaccine, be made five dollars. Motion prevailed.

The committee to interest the public in the passage of the Owens Bill for the creation of a Department of Public Health, which were appointed at the last meeting, were ordered continued, with power to fill any vacancies occurring.

The following officers were elected for the ensuing year, viz: President, Dr. J. A. Lawson, of Rocky Ford; Vice-President, Dr. H. O. Miller, of La Junta; Secretary-Treasurer, Dr. A. S. Brunk, of La Junta; Delegate to State Society, Dr. Jessie E. Stubbs, of La Junta; Board of Censors, Dr. L. P. Barbour, Rocky Ford, and Drs. H. E. Hall and J. L. Kearns of La Junta.

The paper of the day was read by Dr. M. J. Keeney, of Pueblo, subject, Intestinal Stasis. The paper was exceptionally interesting and the discussion was participated in by all present.

Adjourned to meet in Rocky Ford the second Tuesday in January.

Dr. A. L. STUBBS, Pres. pro tem.
L. P. BARBOUR, Secretary.

FOREIGN JOURNALS

(Translated by Joseph Cuneo, M.D.)

Heroism of Military Surgery.—The annals of military surgery in time of war are full of heroic acts—recorded by the Gaulois and reported in the last number of the *Marzocco*, October 27—but the great public, wrongly, ignores them, because on the battlefield the surgeon is sometimes braver than a brave soldier. Desegnettes, Percy and Larrey are three French surgeons, and they are three heroes. In Egypt Desegnettes, for the purpose of calming the fear of the army, which was well justified, unhesitatingly inoculated himself with the bubonic plague. To those that expressed their admiration he simply answered: "If the inoculation that I have faced has found me inaccessible and has not jeopardized my life, it is because I was out of the conditions in which the plague communicates itself."

Percy was military health inspector general during the French revolution. In the army of the Rhine he organized the ambulances and the surgical ambulance corps which rendered the greatest services during the campaign. From 1792 until 1815, that is, during all the period of the Republic and the Empire, Percy never left the battlefields unless he had to go into the hospitals. His courage was proverbial. He would enter among bullets and shells into the places where the battle was raging the worst, and unconcerned for his life, would arrange his instruments and perform the most urgent

operations. An eye disease prevented him from taking part in the Russian campaign, but we find him nobly at his post of duty at the battle of Waterloo.

And Larrey? At the attack on Alexandria in Egypt, he saves the life of two generals, Menier and Kleber, and under the fire of the cannons of the enemy he operates and saves the life of Adjutant General Lasalle. He invents the ambulance, which organization is so adequate to its object that even today is surprising. By means of the ambulance he performs the miracle of saving also General Destre, wounded nine times by saber and by one bullet in the breast. At the battle of Saint John of Acre the surgeon is himself wounded. General Napoleon Bonaparte presents him with a golden-handled sword, with this inscription: "Larrey at Abukir." Larrey is everywhere. He is at Boulogne, from where he follows the army into Germany. He is at Essling, where his ability and valor are such that Napoleon eulogizes him in the presence of the whole army. At Wagram, after he amputated under the terrible fire of the cannons of the Austrians, Generals d'Alcoville, Corbineau and Doumenil, Napoleon created him baron of the empire. But it was especially in Russia where Larrey excelled himself. During that campaign he treated no less than 10,000 wounded soldiers, Russian and French alike. And at Waterloo he is

still a little hero: he is himself wounded and taken prisoner. Louis XVIII called him the most honest man of the century, retained him in all his positions and appointed him chief physician and surgeon of the royal guard, as Napoleon had appointed him supreme surgeon of the "Grand Armee." Larrey died in 1842, lamented by the whole nation.

And even today, in our modern wars, how many are the surgeon heroes of whom the people know nothing about their noble work and their risks and dangers!

(La Riforma Medica, Naples. Nov 2, 1912.)

Physiopathology of Traumatism of the Stomach and Omentum, by D. Maragliano. Studying the action exercised on the blood pressure by manipulations and pulling on the small omentum and stomach, he has arrived at the following conclusions:

1st. The stretching of the small omentum and of the stomach, done while the patient is under complete chloroform narcosis, constantly causes a lowering of the blood pressure and a slowing of the heart beats.

2nd. Done under a combined narcosis, as with morphine and chloroform, it produces, on the contrary, a constant increase of the blood pressure and of the cardiac beats.

3rd. Done under chloroform narcosis after the cutting of the pneumogastric nerve, it causes a lowering of the blood pressure, leaving unaltered the cardiac beats.

(Royal Medical Academy of Genoa, April,

May and July meetings, 1912. La Riforma Medica, Naples, August 10, 1912.)

Academy of Medicine of Paris, meeting of October 8, 1912.

A Special Variety of Appendicitis Never Before Described, Boekel.—It is a form of appendicitis that may cause the most dangerous complications. In it is formed adhesions between the extreme termination of the infected appendix and the anterior portion of the adjacent mesentery. The appendix perforates it and empties its toxic-infective products between the sheets of the mesentery. A tumefaction is formed there, difficult to diagnosticate, as it can easily be mistaken for empyema of the gall bladder. In a short time are therefore formed adhesions between the various segments of the intestine, which may form a compact mass, so that it is still more difficult to make a clear diagnosis. Furthermore, between the different intestinal folds are formed real purulent pockets, difficult to recognize, that cause death on account of peritonitis. The author believes that the only feasible way to attempt to save the patient's life is to intervene at once, and cut away the affected portion of the intestine. In a case he saved the patient by resecting 80 centimeters of the ileum and 90 centimeters of the caecum and of the ascending colon. After the operation he established in ileocolic anastomosis and also, a little later, a fecal fistula. (La Riforma Medica, Naples, Italy, Nov. 2, 1912.)

BOOKS

A Practical Medical Dictionary of Words Used in Medicine with their Derivation and Pronunciation, Including Dental, Veterinary, Chemical, Botanical, Electrical, Life Insurance and Other Special Terms; Anatomical Tables of the Titles in General Use, and Those Sanctioned by the Basle Anatomical Convention; Pharmaceutical Preparations, Official in the U. S. and British Pharmacopaeias and Contained in the National Formulary; Chemical and Therapeutic Information as to Mineral Springs of America and Europe, and Comprehensive Lists of Synonyms. By Thomas Lathrop Stedman, A. M., M. D., Editor of "Twentieth Century Practice of Medicine;" Editor of the "Medical Record." Second, Revised Edition. Illustrated. Price, \$4.50 net, plain; \$5.00, indexed. New York: William Wood and Company, 51 Fifth Avenue. 1912.

We had the pleasure of reviewing this great work somewhat in extenso in the July, 1911, number of the Denver Medical Times, and to note therein its features of special excellence. Although the first edition appeared so complete and so nearly perfect, the author in this second edition issued within about a year of the first, has inserted over 2,000 new titles and subtitles,

has corrected the few errors which existed and has brought the bibliographic data down to date. The book is all that a medical lexicon should be, and is besides highly artistic and satisfactory to handle.

State Board Examination Questions and Answers, of the United States and Canada. Reprinted from the Medical Record. Fourth Edition. New York: Wm. Wood & Co.

This is a volume of convenient size, containing authoritative questions from all the examining boards of the continent. The answers, while terse and brief, are accurate and authentic. The book is an especially useful one to whomsoever wishes to review preparatory to taking a state board examination. It is no less useful to anyone who desires to make a general review of his medical knowledge, and can be commended for either of these purposes. It is well bound and presents a neat appearance.

L. P. B.

The Practice of Obstetrics. Designed for the use of Students and Practitioners of Medicine. By J. Clifton Edgar, M. D., Professor of Obstetrics and Clinical Midwifery in the Cornell University Medical College; Visiting Obstetrician to Bellevue

Hospital, New York City; Surgeon to the Manhattan Maternity and Dispensary; Consulting Obstetrician to the New York Maternity and Jewish Maternity Hospitals. Fourth Edition, Revised. Twenty-second thousand. With 1,316 Illustrations, including Five Colored Plates and 36 Figures printed in Colors. Philadelphia; P. Blakiston's Son & Co., 1012 Walnut Street. 1913. Price, \$6.00, net.

This, the fourth edition of Edgar's work, is the most exhaustive single volume treatise on Obstetrical Practice which has been presented to the profession. Indeed the amount of text and very generous illustrations would readily make a good-sized two-volume work.

The subject matter has been divided into ten parts, and each part given the logical prominence and position which its importance and relation to the general subject demands.

New material has been added; especially has the discussion of pathological conditions been revised and made to conform to the latest findings in the field. The significance of blood pressure observations as well as the discussion of anesthesia in obstetrics and the use of vaccine and serum therapy are presented in a comprehensive manner.

There is added also a discussion and illustration of the Momburg belt for the control of hemorrhage.

This is, I believe, the most complete single-volume treatise on Obstetrics published. There is no phase nor feature of the subject untouched. B. O. A.

Nutritional Physiology. By Percy G. Stiles, Assistant Professor of Physiology in Simmons College; Instructor in Physiology and Personal Hygiene in the Massachusetts Institute of Technology, Boston. 12mo of 271 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, \$1.25 net.

The point of view of the author in this volume is "that all living things are transformers of energy, and engaged so long as they live in reacting according to the principles of mechanics and chemistry in response to external changes." He has given us a charming and quite up to date presentation of the subject along these lines. For a clear and impartial statement of the facts in the case, we commend the reader particularly to the chapter upon "Alcohol." Physicians as well as laymen will find this book of unusual interest. E. C. H.

A Manual of Auscultation and Percussion, embracing the Physical Diagnosis of Diseases of the Lungs and Heart, and of Thoracic Aneurysm, and of other parts. By Austin Flint, M.D., LL.D., Late Professor of Medicine and of Clinical Medicine in the Bellevue Hospital Medical College, etc., New York. Revised by Haven Emerson, AM., M.D., Associate in Physiology and in Medicine, College of Physicians and Surgeons, Columbia University, New York. 12mo, 361 pages, illustrated.

Cloth, \$2.00, net. Lea & Febiger, Philadelphia and New York, 1912.

It is a pleasure to note that this masterpiece among manuals is again republished with but slight alterations and but few additions. Due mention is made by the editor, however, of the newer mechanical methods of examination, and two new chapters have been added on the nervous system and the abdominal viscera. Among the figures illustrating the text, those representing the zones of Head are especially instructive.

W. B. Saunders Company, medical publishers, are now established in their new building on West Washington Square—an ideal site right in the heart of Philadelphia's new publishing center.

The remarkable success of this house and the rapid growth of their business, with the increased facilities which this growth demanded, necessitated removal to larger quarters. They therefore erected a seven-story building, housing all their departments under one roof.

Constructed of reinforced concrete, the building is absolutely fireproof and equipped with every modern aid for the manufacture and distribution of medical books and for the comfort and convenience of their employees.

A cordial invitation is extended the profession to inspect the new plant.

SOME UP-TO-DATE DEFINITIONS.

Angel. A man who furnishes a woman with the "dough"—for a consideration.

Clothes. What makes life worth living.

Duty. A nearly obsolete term—often confused with "Do 'em fust."

Elixir of Life. The smell of burning gasoline.

Ethics. A code of rules for the other fellow to follow.

Father. A biped machine for grinding out the dollars.

Genius. Ingrowing mental corns.

God. A word used to give emphasis in swearing.

Home. Two sharps in a flat.

Liar. "A terrum iv indearment applied to gentlemn occupyin' public office, or thim hopin' it."

Love. A form of fetic worship of "a rag, a bone and a hank of hair," the last being technically termed a rat.

Mother Love. The only real sentiment in the world.

New Woman. A cigarette-smoking artifact, of about as much use for marital purposes as a pine board.

Paragons. Ex-prostitutes, ex-ward heelers, ex-advertising quacks.

People. The yellow press and their satellites.

Reformer. A weary Willie in search of a sinecure.

Smart Society. A melange of "Giggle, gabble, gobble and git."

Utah Medical Journal

Address all articles, personals, items of interest, and books for review, intended for the Utah Journal, to the Editor, Frederic Clift, M. D., Ogden, Utah. All advertising correspondence should be addressed to the main publishing office, 1839 Champa Street, Denver, Colorado.

Our prices on Reprints about cover actual cost. Those ordering Reprints must order at the time of revising their proofs.

We will give to contributors of original articles, or mail to addresses furnished by them, a generous number of copies of this journal free of charge. The names and addresses must be sent to the editor at the time of furnishing the manuscript.

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TO OUR LEGISLATORS, SCIENTIFIC AND EDUCATIONAL BODIES AND OUR READERS.

We desire to call attention to the first article in our Department of Eugenics, this issue, entitled, "Conservation and Reproduction of the Unfit," by Dr. D. H. Calder, Superintendent of the State Mental Hospital. It is not only a noteworthy statement of very important facts, but the suggestion that the legislature should authorize the appointment of a Board of Eugenics to act with the State Board of Health in connection with the Public Schools, the Industrial School, the School for the Deaf, Dumb and Blind, the State Mental hospital and the State Prison is the most far reaching and practical program of work yet put forward by Eugenists and places the Science of Eugenics upon a broad and firm foundation. It has been argued by many that Eugenics is not a practical science, and that in every day life the eugenist is a visionary, but there is nothing visionary in the work now proposed to be devolved upon the "Utah Board of Eugenics."

If authorized by the legislature its duties would be, to gather all possible data relating to heredity, the transmission of disease and pathologic tendencies, the environment and suitability to marriage. Proper information would be given to the public in bulletins, lectures and newspaper articles. All data in its possession would be at the command of the State Board of Health. Its executive duties would be to provide for the personal examination of applicants, as to their fitness for marriage and reproduction, to issue certificates to those whose condition makes sterilization advisable, to provide for operations at the public expense by qualified surgeons in the various counties of the state; to make the operation a condition precedent to the release of the feeble-minded or perverted now in confinement in the State Mental Hospital and the Industrial School, whose liberty otherwise would be a constant menace to the eugenic welfare of the community. The penal code should be so amended as to give power to the courts of superior jurisdiction, to impose on recommendation of the "Board of Eugenics," sentences of castration as the alternative to imprisonment for certain crimes of sexual perversion, and to require the State Board of Pardons to make sterilization a condition precedent to the granting of pardons, or paroles from penal institutions, when in the judgment of the "State Board of Eugenics" sterilization would be advisable.

We heartily endorse Dr. Calder's recommendations, believing that they form a substantial foundation upon which the "breath of life" can be breathed into Eugenic principles. We hope to see action taken along these lines in the forthcoming legislature. We ask our readers to take the matter up with their representatives, so that it may be understood that we are of one mind upon this important state and national question.

PROGRESS AND REACTION.

Reprinted from the Journal A. M. A., November 23, 1912.

"The influence of the propaganda against medical fakes is repeatedly shown and in no way better than in the changing attitude of publishers toward the admission of advertising matter. To the disgrace of the medical profession it must be said that as a class the publishers of lay Journals are showing a greater desire to rid their advertising pages of fraudulent medical advertisements than are the publishers of medical journals. Hardly a week passes without some evidence of the fact. This week we have received a copy of the Pulaski County Democrat, a newspaper published at Winamac, Ind., By the same mail we also received a copy of a Colorado medical journal—the Denver Medical Times. The newspaper has an editorial entitled 'Advertising Fakes,' in which the editor tells why the publishers turned down an advertising contract for the 'consumption cure' fraud, 'Nature's Creation.' The medical journal on the other hand, has an editorial entitled, 'The Medical Index Expurgatorius and Independent Journalism,' in which the editor boasts of the fact that the proprietary preparations advertised in his journal are not confined to those that have been accepted by the Council on Pharmacy and Chemistry for inclusion in new and non-official remedies. Incidentally he takes the opportunity to attempt to belittle both the Council and the A. M. A. A glance at the advertising pages of the Denver Medical Times makes plain why the publishers of that journal are not willing to accept the findings of the Council on Pharmacy and Chemistry. Practically the whole of its advertising receipts are derived from the exploitation of proprietories that either have not been approved by the Council or have at various times been shown to be fraudulent or worthless. 'Nature's Creation' was examined in the Association's laboratory and found to be essentially a solution of potassium iodid in water and alcohol. To sell such a mixture as a cure for consumption is, of course, a fraud. When the Pulaski County Democrat was offered an advertising contract for the stuff, the publishers wrote to the Journal for information. On receiving the data furnished, they naturally refused to lend their advertising pages to perpetrate the fraud."

All of these statements are intended to lead up to a "suggestio falsi" and brands the writer as a juggler of words. The Denver Medical Times and Utah Medical Journal never has, and does not now carry any advertisement of "Nature's Creation." But this gentleman who presumedly calls himself a fair

mindful representative of the J. A. M. A. in order to make his "suggestio falsi" stronger proceeds to couple up with this fake a well known preparation that is advertised in our Journal as well as in other high class Independent Journals.

"Papine," when examined in the Association's laboratory was found to be essentially a watery-alcoholic solution of morphine with glycerine. It is sold under the claims that it does not "show habit-forming tendencies" and "does not suppress the secretions." Such claims for a disguised morphin preparation are just as fraudulent as the claims made for Nature's Creation; but the Denver Medical Times is perfectly willing to sell its pages to exploit this preparation—and many others that are just as bad—and to blackguard those men whom the A. M. A. has seen fit to appoint to investigate and expose fakes of this kind.

The mental equilibrium of the writer must be easily upset and he must be indeed in "bad case" when failing argument, he like a "second rate attorney" descends to vulgar abuse. We refer our readers to our article in the Medical Journal, December 7, 1912). Utah Medical Journal which we reprint on page . . in this number. It was far from our thought to "blackguard" the Council on Pharmacy and Chemistry appointed by the A. M. A. As proof of this we quote the paragraphs in relation to the Council as they appear in our article.

"The composition of this laboratory committee of chemists or near chemists is such, that although recognizing their individual ability as chemists, they admittedly are not capable or qualified, and as a fact they do not attempt to make any clinical researches or tests as to the effect of such drugs upon 'sick humans.' Failing such clinical tests, the findings of the laboratory committee of the A. M. A. are incomplete, although very valuable so far as they cover the ground of purity and the scope of their contents. They cannot, however, be accepted in toto by the physician in actual practice, and he must therefore make the clinical tests

for himself unless he is prepared to sometimes see his patient die because the laboratory committee is unqualified to properly complete the examination in the only practical way."

Where is there any "blackguardism" or even any "attempt to belittle both the Council and the A. M. A. in this extract or in any part of our article? As to Papine itself we refer the readers of the J. A. M. A. to page 209 of our Journal, where they will find the following: "Compared with the useful opiate, Papine will be found **much more free from those disagreeable effects** ordinarily considered inseparable from preparations of opium, such as constipation, nausea, gastro-intestinal derangement, and tendencies toward habit formation. In brief, Papine is the ideal preparation of opium, presenting all the advantages of this well-nigh indispensable drug with its nauseating, constipating and habit-forming tendencies **reduced to a minimum.**" **Mark well the words in black.** The words as quoted by the editor **might mislead him**, but we defy any one to say that it would deceive any physician, even one practicing in the "furthest limits of the back woods" of Canada or Mexico. The editorial proceeds to add:

"Though it is typical of over two hundred medical journals published in this country."

It is generally safe to be with the majority, especially if it be good company.

"Its importance as a medical journalistic factor would not have warranted its mention but for the coincidence of its arrival in the same mail with the Pulaski County Democrat. The attitude of the Pulaski County Democrat is typical of a large class of conscientious newspapers."

What a black eye for the mercenary medical two hundred.

"The attitude of the Denver Medical Times is equally typical of a large class of self-styled independent medical journals, and the medical profession is to blame. Will physicians clean up abuses of this sort within the profession on their own initiative or will they wait until an outraged public opinion forces them to do so."

The public do not read medical journals and its opinion therefore is not outraged by a difference of opinion among the members of the profession as to the scientific laboratory and clinical value of a drug or medical compound. The public presume that the physician is a free agent and as such competent to employ such medicaments as will meet their individual cases. They assume that the ordinary educated physician is an honest, independent, entity—and one that cannot be "bossed" by the editor of a medical journal, even though published by the A. M. A., and that he has a brain of sufficient capacity to tell whether a derivative of opium is or is not liable to produce certain effects without relying on the manufacturer's or editor's ipse dixit. Dr. G. Frank Lydston in his paper entitled "Why I Write for Independent Journals," says: "One of the principal objections of the 'super-perfects' in medical literature offered to the independent journal is the character of its advertisements. Time was when that journalist mentor, the Journal of the A. M. A. would take almost any old thing in the way of a paid advertisement. Wherein lies the change of front? Is it a matter of conscience or a fat-bellied prosperity that no longer needs or craves the flesh-pots of Egypt? Once upon a time this advertisement appeared in its columns: 'Wanted—A gentleman, past middle life, who has been incapacitated by a surgical operation for the performance of his conjugal duties, would like to meet a lady similarly situated. Address, No. 1001, Journal office.' What has happened? The same editor—salaam, please—is in charge, and the trustees haven't changed all round. Item: They Couldn't: the political machinery is too perfect. This is not a kick, but a compliment. Once more salaam, O ye faithful. Really, somebody must recently have injected a large dose of ultra-ethical serum into the veins of the reigning medical dynasty." Was it

the weight of "an outraged public opinion" that forced the J. A. M. A. to blue pencil this and other obnoxious advertisements? How about "**Ext. Chinae nanning**" advertised in current issues of the J. A. M. A.? See Dr. Robinson's article entitled "Sickening Inconsistency" in this issue of our Journal.

A DISHONEST EDITORIAL AND A NASTY STATE OF AFFAIRS.

As I said before, the Journal of the American Medical Association is one of the best medical journals published in the world, and it is painful and disagreeable to have to criticize it; and I would like it much better if it were conducted so that I should have to bestow nothing but praise upon it. But **amicus Plato, magis amica veritas**. Within the last few months it has published a number of editorials which cannot be characterized otherwise than by the word nasty; and nothing will prevent me from criticizing a journal, good as it may be in all other respects, if for some reason or other it begins to prostitute its pages and becomes guilty of irresponsible statements, chicanery, charlatanism and downright dishonesty. There has hardly been an issue of the J. A. M. A. within the last four months which did not contain at least one editorial deserving these epithets.

As an example I will take this week's issue (April 13). It contains several excellent editorials, but one very nasty one. That one is entitled "Therapeutic Efficiency." The editorial in question very properly says that "therapeutic efficiency is by no means the only element to be taken into consideration in determining whether a product is or is not a fraud." With this we fully agree, but here the Journal proceeds to give an example:

"Suppose an unscrupulous individual with no knowledge of medicine or pharmacy, but with an hypertrophied advertising sense conceives the idea of

exploiting an 'ethical' proprietary. He takes equal parts of quinin sulphate and starch, has them made into tablets or put up in fancy-colored capsules. He gives the mixture a catchy but meaningless name and obtains a perpetual monopoly of that name under our trade-mark law. He buys advertising space freely in the so-called independent medical press. He tells the physicians of the country that his wonderful preparation is a tertiary diamine of the natural order of **Cinchonaceae** in combination with amylose ($C_6H_{10}O_5$)_n. He recommends it for everything from soft corns to hard chancres. Has the stuff any 'therapeutic efficiency?' Certainly it has. For malaria, it will be just as valuable as one-half the same quantity of quinin. True, quinin sulphate sells for 25 cents an ounce while our advertising friend asks \$5 an ounce for his proprietary preparation. Notwithstanding this, it must still be admitted that it is good—for malaria. It has 'therapeutic efficiency.' Why then should not the Council on Pharmacy and Chemistry approve it? Why should not medical journals aid the swindler in exploiting it by sharing the profits in the fraud? This hypothetical case is no exaggeration of conditions that exist in the pharmaceutical world today. Hundred of simple mixtures are sold under the most fraudulent claims."

All this is stupid, idiotic demagoguism for the purpose of damnable sensationalism. I am never general in my condemnation, but I always make specific charges; and I challenge the gentleman responsible for this editorial to mention **one single product** advertised in the medical journals which is similar to the example given in the editorial. The editorial states distinctly "this hypothetical case is **no exaggeration** of conditions that exist in the pharmaceutical world today." If it is no exaggeration then it should not be difficult to mention a dozen preparations which are as common in their composition as

a simple mixture of quinine and starch and which are advertised in medical journals as good for everything from soft corns to hard chancres.

I say that the writer of that editorial is either an ignoramus utterly unfamiliar with pharmaceutical conditions of the present day or he is a deliberate liar. Among the nostrums advertised to the laity, particularly in the lower class newspapers intended for farmers, there are such palpable and unequivocal frauds, but **there are no such preparations at the present day advertised in the medical journals for the medical profession.** It is a disgrace for an official journal to make such statements, for they calumniate and wantonly insult: first, pharmaceutical manufacturers whom they thus stamp as common swindlers; second, the medical publishers and editors of the country, whom they thus stamp as sharers in the frauds and swindles; third, the medical profession at large whom they thus stamp as imbeciles and ignoramuses incapable of exercising the slightest discrimination in the selection of their remedies.

There is also another side to the question. Such editorials have an extremely injurious effect in throwing the entire profession into discredit with the public, for the quacks are quick to pick up all criticism of the medical profession by medical journals—they have special people now devoted to this purpose—and they are not slow to show to the public what the official Journal says of the medical profession at large and of its ignorance and lack of discrimination in treating patients. Were this true then I would have no objection to this publicity, because I do not believe in hiding any evils existing in our profession from the public, but to deliberately distort the truth and to make us appear in the eyes of the public a thousand times worse than we are, this is certainly a miserable piece of

business for our official Journal to engage in.

My readers know that I do not hide behind generalities and vague accusations. I have made this editorial as plain and as strong as I could, and I herewith challenge either the editor of the Journal of the American Medical Association or any Committee of the American Medical Association to discuss this entire question in public and to determine whether the Journal's editorials concerning proprietary preparations and medical advertising represent the full truth or are full of distortions of the truth, malicious innuendoes and unjustifiable accusations, and I shall be willing to abide by the result of such a debate. It is a very, very serious matter for the official Journal of the Association to be guilty of such reckless utterances and misstatements as have characterized some of its editorials of late. No venal commercial journal has ever been guilty of worse perversion of the truth.—William J. Robinson, M.D., Critic and Guide, May, 1912.

SICKENING INCONSISTENCY.

And here is something to make the obtusest intellect smile, if an intellect can smile. The J. A. M. A. gives a hypothetical example of a nostrum consisting of quinine and starch which is recommended for all diseases from soft corns to hard chancres. Such a preparation does not exist among ethical proprietaries advertised to the medical profession, and is merely a figment of the editor's overheated brain. But here is something funny. In the same issue of the J. A. M. A., on advertising page 43, there is advertised a preparation under the name of "Ext Chinae Nanning." It is a preparation of cinchona containing five per cent of alkaloids, but it is advertised as "a bitter tonic of exceptional utility in all functional gastric disorders, **defective metabolism** and dis-

eases of **psycho-neurotic** origin." Isn't that absurd? Does the editor really believe that the cinchona alkaloids are of exceptional utility in all functional gastric disorders? Are the cinchona alkaloids of exceptional utility in defective metabolism, which may have hundreds of etiologic factors? And since when have the cinchona alkaloids been of "exceptional utility in diseases of psycho-neurotic origin?" Does the editor really believe that this is true? If this same statement were made about some other proprietary, non-approved by the Council, then the editor of the J. A. M. A. would howl "fraud and humbug," but because it is advertised in the J. A. M. A. it is all right. Can the king really do no wrong? Gray's Glycerine Tonic is a nostrum, according to the wiseacres of the Council, while Ext. Chinae Nanning is not. Oh rot! it is becoming sickening.—William J. Robinson, M.D., Critic and Guide, May, 1912.

ANTISEPTICS MAY BE ADVERTISED TO THE LAITY—AT LAST

Every suggestion, every reform that we propose comes to pass—in due time. For we only suggest things that are right, that are in the line of progress, that are of benefit to mankind, and that are **feasible**. The time is sometimes slow in coming, but come it does. We have always claimed, contrary to the Council and our ultra-ethical pin-heads, that there can be no objection to advertising antiseptics to the laity, even when used on the human body. And four years ago (June, 1908) we had the following editorial in The Critic and Guide:

"We can see no valid objection to advertising antiseptics for external use to the laity, either by circulars or through the newspapers. Recognizing as we do (the better part of us), that prophylaxis, prevention of disease, is one of the physician's most important functions—we believe that in the future prophylaxis will be considered a more important function even than the

treatment of diseases—we should be glad to have the people acquire an intelligent acquaintance with the nature of antiseptics, the character of various antiseptics, their uses, etc. It is our opinion that the physician who objects to advertising antiseptics to the laity is just a little narrow-minded, and not entirely altruistic."

Now, at last, after four years' deliberation—bureaucratic bodies move slowly—the Council on Pharmacy and Chemistry has come to the conclusion that we were right, and in this week's issue of the J. A. M. A. (April 13) appears the report of the Committee on Advertising of Antiseptics, Germicides and Disinfectants to the Public, which concludes with the following recommendation:

"The advertising to the public of antiseptics, germicides and disinfectants accepted for inclusion with New Non-official Remedies shall be permitted, provided that it be limited to conservative recommendations for their use as prophylactic applications to superficial cuts and abrasions of the skin and to the mucous surfaces except those of the eye and the gastro-intestinal and genito-urinary tracts. In no case shall it include recommendations for use as curative agents, nor shall the names of any diseases be mentioned in such exploitation. If the preparation is sufficiently toxic to require caution in its use to prevent poisoning, this fact shall be stated on the label."—William J. Robinson, M.D., Critic and Guide, May, 1912.

THE MEDICAL INDEX EXPURGATORIOUS AND INDEPENDENT JOURNALISM.

The council of the Utah State Medical Association has decided that the proceedings and papers read at their recent annual meeting at Ogden are to be published in a Seattle journal, and not by a journal edited and contributed to by local physicians and circulating among the medical profession and scientists of Utah. The council, by their action, would seem to be afraid to allow the Association papers to be read by those outside its membership, and therefore hides them in a journal having no circulation in Utah and one which is not read or known to the profession of the state.

The only tangible reason advanced for such action was that the local medical journal allows advertisements to be inserted relating to drugs and medical supplies which have not been passed upon and approved by a committee of so-called experts appointed by the American Medical Association. The composition of this laboratory commit-

tee of chemists or near chemists is such that although recognizing their individual ability as chemists, they admittedly are not capable or qualified, and as a fact they do not attempt to make any clinical researches or tests as to the effect of such drugs upon "sick humans." Failing such clinical tests, the findings of the laboratory committee of the A. M. A. are incomplete, although very valuable so far as they cover the ground of purity and scope of their contents. They cannot, however, be accepted in toto by the physician in actual practice, and he must therefore make the clinical tests for himself unless he is prepared to sometimes see his patient died because the laboratory committee is unqualified to properly complete the examination in the only practical way. The secretary of the Utah Association, whose researches apparently do not extend beyond the pages of the approved list of drugs recommended by the A. M. A., sought to limit the advertisements in the Utah Medical Journal to the drugs, etc., approved by this laboratory committee, but in the interests of our subscribers and readers we absolutely refused to discontinue advertisements from our pages merely because they had been placed in the Index-Expuratoriis of the American Medical Association on the report of a partially qualified laboratory committee. We did, however, offer to investigate any advertisements which the Utah council might consider fraudulent or unethical, and if so found, we offered to discontinue same; but after careful search the council failed to name one such advertisement.

We believe our subscribers and readers will approve our action in claiming the right not alone for the physicians and scientists of Utah, but also for those in other states and English-speaking countries where our journal circulates, to judge for themselves as to what drugs, etc., they shall use in the exercise of the right given to them by the state or civil authority to minister to the sick and afflicted; as also the right to exercise their own judgment in making personal laboratory and clinical tests of the remedies they may decide to employ. The sick, unless they are insane—the class with which the secretary has had to deal—expect and have the right to demand that the physician who attends him will exercise his scientific knowledge in every possible way, including the reading of medical advertisements, whether approved or not by the A. M. A. This being so, the physician is bound to use his best judgment and the appropriate drug, vaccine or other remedy whether passed upon and approved by the American Medical Association or perchance by the Eclectic or Homeopathic associations, or found in the advertising pages of the Utah or any other independent medical or scientific journal. One thing is clear; the physician cannot delegate his duty to his patient to a committee of chemists, whoever

the personnel may be appointed by, or to the owners of advertisements found in independent or even state medical journals. He must exercise his personal judgment in the testing and selection of his remedies in order to acquit himself before God and man.

It is unnecessary to say that we turned down this irrational proposition, and that we go on our way fighting against "bossism" in our medical societies and for the "freedom" of our independent medical journals. We consider the suggestion of the State Secretary an insult to independent journalism, and it is one we resent on behalf of our brethren of the independent medical press.

WHAT ARE THE USEFUL DRUGS.

Dr. Osborn of Yale, in the J. A. M. A. reduces the pharmacopeia to about one-fourth of its present size, and then goes one better by eliminating most of the few remaining drugs. Why cumber the mind of the student or of the practicing physician with drugs that are not approved by the "super-perfects" of the profession? Dr. Osborn kindly allows the physician to impose upon the public the appearance of doing something. Seemingly they may carry a tool chest in the shape of a medicine case. Alcohol is sufficient for Menstrual disturbances. Pepsin and diastase are not necessary. They may act as a placebo. Why use anything else than potassium citrate to render the urine alkaline? On the strength of not having wiped out all drugs, as yet—he says: "I am not a drug nihilist. I believe thoroughly in the activity of drugs, but I deplore the profession being fooled by promoters of so-called new drugs and synthetics." In a discussion which followed the reading of Dr. Osborn's paper—Dr. Solis Cohen said: "There is no objection to any physician restricting himself to the tools he knows how to use; but there is every objection to his attempting to restrict some other physician who has other, and perhaps better, tools and methods. The pharmacopeia should admit every drug that is known to be of advantage in the treatment of the sick, no matter how seldom it is prescribed

and no matter how many other drugs there may be which have similar influence.

"Potassium citrate may be the only diuretic salt needed at Yale, but some of us have formed the habit of using potassium acetate occasionally. Why should the American Medical Association say, even to Philadelphia barbarians, 'You must not use "tweedledum;"' you must accept the dictate of Olympus and employ "tweedledee"?"

"This question is not so simple as one may deem in looking at it from the purely personal point of view. I have no objection to Yale's restricting itself to twenty drugs, or to Oxford's restricting itself to four, or to Harvard's restricting itself to none; but if the patient happens to be under my care and my judgment tells me that I shall use a remedy which is outside of the twenty or the four that are sacrosanct, or even the nine hundred and forty that are officialized, what is my duty under the circumstances? To bow to some **prohibitive restriction imposed in ignorance** of the existence of that patient and of the conditions that he presents, perhaps in ignorance of the existence or of the influence of the remedy I propose to use? Maybe so—but I do not see it in that light. My patient is entitled to my knowledge unhampered by **orthodox, or even official, ignorance.**

"For example, I have had an interest-discussion lately with regard to aspidospermine. This potent drug does not find place in the pharmacopeia of today; it probably will not find place in the pharmacopeia of next year or the year after. Aspidospermine, therefore, omitted from the pharmacopeia to please restrictionists who know nothing whatever about it from personal observation, must not be prescribed by me on account of such omission, although I should not know how to treat certain cases of asthma without it. I know how asthma is treated with-

out it, of course, but I should not know how I could give my patients the benefit of the knowledge and skill they are entitled to." We are willing to sail in the same boat with Dr. Solis Cohen.

OUR ADVERTISEMENTS AND PLATFORM.

We can heartily commend and endorse the platform recently stated editorially in the Medical Review of Reviews, which is one of the most prominent monthlies published in New York City. It seems to us to foot up the situation very well, and we quote it as follows, as applying equally to this journal, and probably all the other journals of the A. M. A. clique:

"No advertisement is accepted for publication in the Denver Medical Times, Utah Medical Journal and Nevada Medicine, which has a secret formula or which makes claims which cannot be upheld by a clinical trial. Every claim made by an advertiser in our journal for his product is based on clinical evidence, and is accepted for publication regardless of the fact that the manufacturer's name may be blown in the bottle, or some other minor detail which is of neither interest nor value to the physician.

"What a physician wants—or should want—to know, is, will the remedy do what is claimed for it by the manufacturer; will it help my patient?"

"We should be thankful and grateful to the physician who will point out a single product represented in our advertising section which, when used in the cases in which it is indicated and recommended by the manufacturer, fails to do what is claimed for it. The patient—and it is to him we owe our duty—is interested only in being helped and cured, and cares nothing for the endorsement or rejection of a remedy by a body of chemists who have not given it a clinical trial even in a single dose.

"The above will appeal only to those who are not following blindly the prejudices of others, but who have the courage to dare to do their own thinking and form their own conclusions. How many such are there left?"

THE UTAH PLAN—PROBLEMS OF THE WORKING GIRL.

Dr. Jane Skofield of Salt Lake City, one of the recently elected members of the Utah legislature, in speaking to an audience that filled the guild hall of

the Episcopal church at the regular meeting of the Sunday Night club reviewed some of the many problems of the girl without vocational training. She emphasized the importance of proper sanitation, etc., in department stores, laundries and other places where girls are employed, for when the physical health is impaired by foul air, lack of proper food and rest, the moral stamina is weakened.

The speaker dwelt especially upon the great need of proper sex education to enable a girl to understand and resist the many temptations of our modern cities.

She urged the audience to back up the movement to pass the laws in reference to venereal disease, physical examination before marriage, etc.

The Ogden Evening Standard of December 10th, in an editorial on the subject, strengthening the present venereal disease law quoted very fully from two articles in the December issue of the Utah Medical Journal, entitled, "Medicine, Health and Matrimony," and

women voters of Utah to the front. With the lay press supporting our efforts, we feel assured that the four new laws we are advocating will receive the careful consideration of our legislators.

The four laws suggested in the resolution of the State Medical Association are:

(1) A Certificate of Health Before License to Marry.

(2) The Sterilization of Criminals and Defectives.

(3) The Wilful Communication of Venereal Disease.

(4) Forbidding the Advertising and Sale of So-called Gonorrhea Cures.

We ask our professional brethren to give the subject their careful consideration—then button hole your respective legislators. Failing a personal interview let each physician write to his own senators and legislators, as also to those to whom he is personally known urging them to support legislation which will prove a powerful deterrent against illicit indulgence, and the evils of clandestine and public prostitution.

THE TREATMENT OF PRURITUS VULVAE.

DR. ALICE E. HOUGHTON

Salt Lake City, Utah.

Since pruritus vulvae is a symptom which may depend upon a large variety of conditions, instead of a disease, the diagnosis of the condition which produces it is of the utmost importance in obtaining a cure, and the curative treatment in different cases must vary widely, depending upon the cause in the particular case. However, the symptom is so distressing and leads in many cases to so much suffering and nervousness, that palliation is well worth striving for in those cases where the underlying cause cannot be removed.

In some cases a very slight itching of the parts causes a habit of scratching, which will produce much congestion

and excoriation of the parts, but if the patient can get relief long enough to afford nature a chance to heal the parts, a cure is assured. Among the causes of pruritus vulvae may be mentioned, uncleanness, urine containing sugar, hyperacid urine, irritating leucorrheal discharges, parasites, pregnancy and local diseases of the vulva.

In all these cases absolute cleanliness should be enjoined. The patient should be instructed to cleanse the parts carefully with a soft wet cloth each time after voiding the urine. In addition, the external genitals should be thoroughly bathed in hot water and soap at least twice each day.

In any case of pruritus, the patient regulated if possible, by the diet. As sible, with plenty of fresh air, bathing, etc. The bowels should be kept open, regulated is possible, by the diet. As to the diet, all stimulating foods or those of an irritating nature, including alcohol, coffee, highly seasoned dishes, spices, cheese, sausages, tomatoes, strawberries, etc., should be forbidden. In some cases, certain patients will have antipathes to certain foods which should be forbidden.

In certain cases where the urine is a cause of the itching, special attention should be given to the diet, forbidding those articles that are likely to increase the acidity of the urine or the amount of sugar. In case of diabetes, the treatment should be directed to that condition. In this class of cases bismuth subnitrate will be found to be a valuable local application.

Where there is an irritating discharge from the vagina the treatment should be directed to the cure of its cause, since it also is merely a symptom of some abnormal condition. However, frequent hot antiseptic douches (potassium permanganate one to 5,000 is a valuable one), will be beneficial in removing one cause of irritation to the vulva. If the douches are followed by the use of a tampon, considerable relief will be experienced by reason of the fact that the discharges will be kept from the organs for a while. However, it often happens that the pruritus is not dependent on the discharges and a cure of them does not always, insure relief from the pruritus.

Where there are thread worms migrating from the anus, or pediculi pubis there are a number of useful applications. If the hair is shaved from the parts to begin with, not so many application will be required to get rid of the parasites. Petroleum ointment, five per cent beta naphthol in petrolatum, or carboglycerin, one in eight, will probably be efficient.

Many women suffer intensely from pruritus during pregnancy, and in those cases only palliative treatment can be given. Keep the patient in bed until the itching subsides. The knee-chest position will often afford relief by reason of relieving pressure temporarily. Applications of hot or cold water followed by dusting with powder, and a pad of cotton wool over the vulva held in place with a "T" bandage, will usually give relief, not only in pregnancy, but in other cases. In case there are small ulcers on the vulva, they should be touched with pure carbolic acid or silver nitrate, followed by the application of some soothing paste.

Friction of the parts in walking, especially in fat subjects, aggravates the condition, and for that reason it is best that local applications be made in the form of ointments. Zinc ointment, mentholated or camphorated petrolatum, or chloroform with petrolatum are all good. In severe cases, narrow strips of gauze may be dipped in carbolic acid (one in twenty parts), and inserted about one inch into the vagina and spread out so as to cover the lips. They should be held in place with a "T" bandage.

In almost every case of pruritus, whether dependent directly upon any of the causes enumerated above, or whether it seems to be idiopathic, there will be found to exist conditions of the structure which bring mechanical pressure upon the nerves to the vulva at some point along their course, or at their origin. A careful search should be made for such condition.

Under the head of mechanical treatment, relief that is amazing to those who have not observed it, will be given in almost every case by the following procedure: Have the patient lie prone upon some hard surface; with the thumbs bring strong, firm pressure in the gluteal region, directly over each obturator foramen. There will always be found to be tender spots at these

points. Relief is given the patient by reason of the inhibitory effect upon the nerves.

After pruritus has subsided, a perfectly bland paste should be employed for some time to protect the parts from

friction. Equal parts of zinc oxide, starch, wool fat and petrolatum, make a very good paste for this purpose.—(Reply to question, cxvii, New York York Medical Journal, December 7, 1912).

DEPARTMENT OF EUGENICS

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"May they say this man is greater than his father was."—Hector's Prayer.

CONSERVATION AND REPRODUCTION OF THE UNFIT.

By D. H. CALDER.

The recent crusade undertaken by the federal government, against those parties who have been using the United States mail for the advertisement of medicine and instruments for the procuring of abortion, will, no doubt, result in a certain amount of good, and also a proportionate amount of evil. It has been calculated that the one-hundred and seventy-three indicted parties probably prevented the birth of two thousand and seventy babies annually. Of these two thousand and seventy, which will now presumably come into being, a certain percentage will, no doubt, become honest, law-abiding citizens, and be a distinct gain to the community at large; of the remainder a certain percentage will die in infancy. Still another percentage will grow up vagabonds, outcasts, criminals and unfit. From this it will be at once evident that so far as the government is concerned, it is just as eager and ready to conserve the unfit as the fit. It acts blindly and en masse. It does not discriminate between what is for the benefit of the race and what is markedly detrimental.

For fear of being misunderstood, let us state at once, and as emphatically as possible, that we have no sympathy with the class of people whom the government is prosecuting, but while we feel that under the present law the government has no choice but to enforce it, irrespective of results, we also feel that there is a great and imperative need for legislation that will recognize that there are certain classes of unfortunates to whom it is the duty of every wise and foreseeing government to forbid reproduction.

The question is often asked alienists,

"What is the chief cause of insanity?" The answer is at once simple and appalling, viz.: the conservation and reproduction of the unfit. If we look this subject in the face, and if we treat it in a common sense manner, we must admit that not only do we view the reproduction of the unfit with a complacency that is simply amazing, but we also take infinitely more pains and spend much greater sums of money for the conservation of the unfit than we do of the fit. Nor can it be said that we are without a remedy. Medical science shows us that in sterilization we have at hand a means of preventing the reproduction of the unfit with absolutely no inconvenience, let alone hardship, to the individual.

If the prevention of abortion is a fit subject for governmental interference, surely the prevention of reproduction by the unfit is much more so, as the principle which clothes the government with authority in the one case, also endows it with the same authority in the other, viz.: the power of the government to interfere with the rights of the individual for the sake of the public good; nor can the objection of violating the sanctity of human life (which is the real reason why abortion is constituted a crime), be raised against sterilization, for what never has existed cannot be destroyed.

True, it may be urged that the science of eugenics is still in its infancy, and that not sufficient is known to be absolute truth to render any drastic legislation wise at the present moment. Be that as it may, there are certain facts regarding the reproduction of the unfit that we do know, e. g., we know that where both parents are defectives, the

offspring always is defective. We do know that the ratio of the unfit to the fit is increasing rapidly; that whereas a few years ago it was one in five hundred, now it is one in three hundred. We do know that at present, with the exception of some seven states, there is absolutely no legislation which aims at preventing, or even curbing, this appalling state of affairs, and we also know that sterilization is an effective check. Then, knowing all this, why not put our knowledge into effect?

It seems to us that a conservative method of procedure would be for the legislature to appoint a board of eugenics to act with the State Board of Health, in connection with the public schools, the Industrial School, the School for the Deaf, Dumb and Blind, the State Mental Hospital, and the State Prison, whose duty and functions should be to gather all possible data relating to heredity, transmission of diseases, and pathologic tendencies, the environment and suitability to marriage. Proper information should be given the public in bulletins, lectures and newspaper articles, and all data should be

at the command of the State Board of Health to provide for the personal examination of applicants, as to their fitness for marriage and reproduction; to issue certificates to those whose condition makes sterilization advisable; to provide for operations at the public expense, by qualified surgeons in the various counties of the state; to make the operation a condition precedent to the release of the feeble-minded or perverted now in confinement in the State Mental Hospital and the Industrial School, whose liberty otherwise would be a constant menace to the eugenic welfare of the community. We feel that the legislature should so amend the penal code, as to authorize the courts of superior jurisdiction, to impose, on recommendation of the board of eugenics, sentences of castration as the alternative to imprisonment for certain crimes of sexual perversion and to require the State Board of Pardons to make sterilization a condition precedent to the granting of pardons, or paroles, from penal institutions, when in the judgment of the state board of eugenics, sterilization would be advisable.

HEREDITY, CRIMINALITY AND THE MEDICAL INSPECTION OF SCHOOLS.

DR. C. F. BALL,

Rutland, Vermont.

In the course of his presidential address to the members of the County Society, Dr. Ball said: The criminal cost to any community is enormous. If investigation makes it evident that a criminal predisposition may be passed on from one generation to another then the subject of medical inspection of schools is proposed as a possible means of detecting in younger life the person who might be classed as a presumptive criminal. Facts are now staring us in the face, showing that the mental defective, degenerate and epileptic are increasing in a greater proportion than the normal individual. Careful observation shows that not many years hence, the present normal individual may be as rare as the degenerate of a few decades past.

It is a blot upon the standard and morals of any nation to find this increase as it bespeaks decadence, intemperance in sexual matters, use of alcohol, drugs and habits, such as our great haste in eating and drinking, the deleterious effects of our strenuous life, etc.

After discussing the apparent transmission of certain tendencies, deformities or diseases from parent to offspring and the action of germ and somatic or body cells, for which, see Vermont Medical Monthly, Sept., 1912, Dr. Ball quotes from the report of the commission of the State of Massachusetts to Investigate the Question of the Increase of Criminals, Mental Defectives, Epileptics and Degenerates of January, 1911.

"We have also been impressed anew with the fact that in considering criminals, the insane, mental defectives and paupers, we were largely studying different phases or expressions of the same fundamental defect. These people often represent individuals or families who for some reason were unable to hold their own. In many families it is found that the form of defect has varied from generation to generation, alcoholics in one generation, paupers or criminals in the next, possibly insanity or mental defect in the next, etc.

"Crime, insanity, mental defect, epilepsy, pauperism and drunkenness, the conditions of degeneracy which this commission is considering are largely perpetuated by the transmission of defect and disease from degenerate or diseased parents."

Good or bad environment then may influence in a definite way the development of the somatic cells within certain limits. If influences may possibly alter, through the body cells, the germ cell, it then becomes the duty of those appreciating this possibility to make efforts to change the environmental influences in one way or the other that the future generations may be better equalized.

Mott summarizes his excellent paper in the Journal Amer. Med. Assn., June 10, 1911, as follows:

"1. Hereditary predisposition is the most important factor in the production of insanity, imbecility and epilepsy. It is the

tendency to nervous and mental disease, generally speaking, which is inherited. This may be termed the neuropathic taint.

2. Education, sanitation and the rest, as Bateson has stated, are only the giving or withholding of opportunity for good or ill.

3. Alcohol is a powerful coefficient, but not of itself the main cause in the production of insanity, except in the rather infrequent cases of alcoholic dementia.

4. Certain types of insanity may be transmitted with greater frequency than others. This has been termed similar heredity. The types are: Periodic insanity (also termed 'manic-depressive'), delusional insanity and epilepsy. The general rule, however, is for a different type to appear.

5. Mothers transmit insanity and epilepsy with much greater frequency than do fathers, and the transmission is especially to the daughters.

6. Anticipation or antedating is the rule whereby the offspring suffers at a much earlier age than the parent; more than one-half of the insane offspring of insane parents are congenital idiots or imbeciles, or have their first attack in the period of adolescence.

This adolescent insanity may take an incurable form of dementia in a large number of cases; in others it is usually mania, melancholia, or periodic insanity, and not infrequently epilepsy with or without imbecility. Very rarely does the parent become insane before the offspring. This is a strong argument of hereditary transmission, possibly hereditary transmission of an acquired character.

7. Regression to the normal average may be (1) by marriage into sound stocks, or (2) by anticipation or antedating leading to congenital or adolescent mental disease terminating the perpetuation of the unsound elements of the stock.

8. High-grade imbeciles who are not at present in any way checked in procreating owing to social conditions interfering with survival of the fittest, together with chronic drunkards, neurasthenics and neuropaths, are continually reinforcing and providing fresh tainted stocks.

9. Recurrent insanity owing to the fact that patients are not segregated for any length of time, is probably the most potent cause of insane inheritance. Facts tend to support the opinion that the recurrent types of insanity during lucid intervals may breed a stock of potential lunatics and paupers.

10. Nature is always striving to go back to the normal average and only relatively few of a stock are insane. A stock with a streak of insanity when combined with genius is not bad, and the same may be applied to a nation; but we only want a streak of genius and insanity, the great body of the nation should be of good normal average for Mott believes that nation will possess the greatest potential virility in the struggle for existence that can breed from the great-

est number of men and women with good bodily health, who possess a large measure of the three attributes of civic worth, viz., courage, honesty and common sense, combined with parentage, pride of family and pride of race."

Man has allowed himself to reproduce with less thought as to the value of his offspring, than he gives to the rearing of either his horses or cattle. He has allowed himself to reproduce his kind apparently with only one thought in mind, that of self gratification.

The second determining influence is spoken of as amphimixis, defusion and intermixing of germ plasms of entirely different individuals. In amphimixis there is a possible help, if it could be properly used in correcting many of the marks of degeneracy that have developed as the result of man's looseness in his matings. History is replete with records of families where inferiors marry, their offspring being epileptics, idiots, degenerates and criminals. It is however possible for the inferior individual to materially improve his progeny by selecting a mate of sound stock.

The following conclusions drawn by Cannon and Kusanoff, Jour. Amer. Med. Asso., June 3, 1912, substantiate this assertion.

"The material on which the authors made their observations consists of the pedigrees of eleven patients and includes thirty-five different matings, a total of 221 offspring. They found that both parents being neuropathic, all children will be neuropathic. One parent being normal, but with the neuropathic taint from one parent, and the other parent being neuropathic, half the children will be neuropathic and half will be normal, but capable of transmitting the neuropathic make-up to their progeny. Both parents being normal each with the neuropathic taint from one parent, one-fourth of the children will be normal and not capable of transmitting the neuropathic make-up to their progeny, one-half will be normal but capable of transmitting the neuropathic make-up, and the remaining one-fourth will be neuropathic.

Both parents being normal, one of pure ancestry and the other with the neuropathic taint from one parent, all the children will be normal, half of them will be capable and half incapable of transmitting the neuropathic make-up to their progeny. Both parents being normal and of pure normal ancestry, all children will be normal and not capable of transmitting the neuropathic make-up to the progeny."

From the above it becomes very evident how readily man may influence his posterity for good or ill.

"Ribbert, Jour. Amer. Med. Asso., July 8, 1912, argues that inheritable pathologic changes in the body must have appeared first in the germ cell, not in the developed organism, insisting that there can be no inheritance of acquired properties.

"He who inherits a predisposition to insanity," says Maudsley, "does not necessarily get it from a parent who happens to be insane; no, not even though his father was insane, when he was begotten, or though in madness his mother conceived him. He gets it from where his parent got it—from the insane strain in the family stock."

Centuries having elapsed in ignorance as to the terrible results of unwise matings, it is evident that it will take centuries to return to a normal stock. Such an ideal condition is impossible, but we should correct our present ways that future conditions may not get even worse.

No one contends that heredity passes on a definite form of criminality, that is, a child is not necessarily a burglar because his parents have been given to that habit, or one is not necessarily a murderer because he originates from a strain of murderers. The bad heredity passes on to the offspring an inability to inhibit actions that his better judgment would teach him to be wrong, but because of his heredity he is able to resist the influences of bad environment. When he gets out with the "boys" he is not able to check himself from going any length, provided he is associated with others of more mature experience to lead him on.

This lack of inhibition or check operates in the same way in one's inability to refuse the drink offered by a friend, a tip for illegitimate purposes, etc. It is also this deficiency that allows a girl to go too far in her relations with her associates and friends. She is unable after certain influences have been brought about her to protect herself by her inhibiting power.

It is wilfulness on the part of but few to be criminals. It is the fact that they become associated with those of experience and are thrilled by the excitement of the occasion and only awake to their senses when they find that they have been unable to extricate themselves from their situation. Normally this power of inhibition should be asserted in the way of not allowing one's self to become entangled in this kind of association.

There are types of degenerates that are lower in the scale than those just referred to, whose thought and action (from their hereditary influence and environment) can be only upon the mean and vulgar. They are not able to think connectedly, to reason or to associate fact and circumstance. They act by impulse, being governed by those things only that please and excite. It is this class that are especially dangerous to society for their tendency to sexual excesses is proverbial. The number of their legitimate and illegitimate children is large and their offspring are usually of a lower grade of degenerates than themselves.

Dr. Ball in concluding his address says it appears to the writer that in the medical inspection of schools we have a possible means of relief. I do not mean to contend

that it is the full solution of the problem, but I feel that it will be a long step in the right direction when this state can have compulsory medical inspection of schools and the law is so framed that there will be a definite system of inspection, and of making reports. When this work is done systematically throughout the state, every child will have a record made of the medical inspector's findings, together with a history of family conditions. Then it is, that the state will have data of inestimable value. This data will include a history of the child's mental state from the day he enters school until he passes out. Such data will be of great value in future studies upon the influences of heredity and environment with relation to disease, degeneracy and crime. It will be of value, in a financial way, to the state in pointing out the child whose inhibitive powers are reduced and environment bad, as being a possible future danger to the community. It will be of value in determining proper individuals for assexing when such a law shall have been enacted. Time will demonstrate that instead of harboring thousands of criminals within its institutions the state will spend money protecting its youth in order to save the expense of their criminal acts and maintenance. The state will assex certain inferiors instead of caring for them and their progeny.

From our study of heredity this afternoon it seems to be apparent that we can look forward to the child that will "hark back" knowing its heredity. That it will be a better policy for the state to look forward to these possible conditions rather than come up to the time when they appear and simply content itself with the fact that the individual has "harked back." He will hark back to some degenerate strain in his ancestry that we know of today and should prevent. Preventive methods are infinitely in advance of curative efforts in political economics as well as in medicine. Today the greater duty of the physician is to prevent the possibility of disease; so it should be the duty of the state with crime.

EUGENICS IN COLORADO.

A CERTIFICATE OF HEALTH BEFORE MARRIAGE.

Mrs. Helen Ring Robinson, state senator-elect, who will be the first woman to sit in the Colorado senate, has announced that she will introduce a bill in the next legislature to compel couples wishing to be married in Colorado to show health certificates before marriage licenses are issued to them.

The proposed law will prevent the marriage of any person suffering from an incurable disease.

The "health marriage" bill will go before the legislature with the indorsement of the women's clubs, the physicians, most of the ministers and the charity organizations.

Nevada Medicine

Address all articles, personals, items of interest, and books for review, intended for Nevada Medicine, to the Editor, Geo. L. Servoss, M.D., Gardnerville, Nevada.

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Our prices on Reprints about cover actual cost. Those ordering Reprints must order at the time of revising their proofs.

We will give to contributors of original articles, or mail to addresses furnished by them, a generous number of copies of this journal free of charge. The names and addresses must be sent to the editor at the time of furnishing the manuscript.

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GEORGE L. SERVOSS, M.D., Gardnerville, Nevada.

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AN INVITATION.

In order that any publication may be a success it is necessary that it have something to print. This is as true of a medical journal as of any other magazine.

Nevada Medicine is a youth in medical ranks and as yet has but few contributors, and consequently does not give the doctor as much as either he or the editors would desire.

As we said in our salutatory, this section of the journal is to be devoted to the interests of the profesison of Nevada, and this being the case, it is natural that we should anticipate contributions from the doctors within the state.

We want short, practical articles, so that we may give you, at least, two per month. Report of cases will also be most acceptable. In fact, anything of a practical nature will be received with thanks.

Nevada Medicine gives you doctors an opportunity to bring your names before the medical reading public, both at home and abroad. Will you not, through your writing, give this section your support, and in such a manner as to make it unnecessary for the editors to go outside the boundaries of the state for contributions?

Were we to go outside Nevada we could undoubtedly list a considerable staff of collaborators, but we do not want to do anything of the sort, as we believe that Nevada has men who can, if they will, give us plenty of material to keep our columns full month after month, and with material which will be gladly accepted by our readers.

We are desirous of establishing a news column and ask that all members of the Nevada profesison mail items of interest to the editor. If you are to be away from home let us know about it. If you receive appointments, or have anything of a distinctive nature bestowed upon you, we want to know it. Such a column will serve to bring the doctors of the state closer together than ever before.

Now get together and give us sufficient material to make **Nevada Medicine** the equal, in every possible way, of the other sections of this journal. Do this and **Nevada Medicine** will soon be a recognized power in the ranks of medical journalism.

Reno, Nevada, Dec. 12, 1912.

Dr. Geo. L. Servoss,
Gardenville, Nevada.

Dear Doctor: Yours of the 8th received, I have just received the copy of the "new Journal." You have done well as a starter, I will endeavor to send in some other articles soon, but at present I am very busy with other matters.

I am enclosing a short report that you can use. I am respectfully yours,
M. R. WALKER, M.D.

THE CONTINUOUS NORMAL SALT SOLUTION BATH.

It is the little things in medicine that frequently count more than do those of great magnitude.. Doctor Walker, in the following report, gives us some ideas which will undoubtedly be of great value to all of us, and as in his case, may save our patients the loss of useful members.. We hope that other Nevada doctors will follow the example of the Doctor and give us reports of interesting cases coming under their observation.. The patient in this instance is given a serviceable hand, one with a thumb at least, owing to the use of the continuous salt bath, and not left handless, as would have been the case had the Doctor taken the advice of his confreres and amputated early, at the wrist.—Ed.

It may be of interest to some of the profession to relate my experience with a severe burn of the hand and the results obtained from treatment with a continuous normal salt bath. Miss C., a girl of about sixteen, working in a steam laundry, in running a blanket through the rollers, caught her hand between the west and hot rollers; before the hand could be extracted the entire back of fingers and hand, almost to wrist, was severely scalded. The usual preliminary treatment was given; the inside of hand

being uninjured, I waited for sloughing and line of demarcation before attempting anything further. The flesh all sloughed off, even the bones were severely burned. A few days after the accident the hand was immersed in a deep pan of normal salt solution and an electric light globe was set in the water to keep it at a temperature of about 100. She kept her hand in this solution continuously for about sixteen hours a day, until the granulation were clean and well marked, at which time the second, third and fourth fingers, together with second and third metacarpals were disarticulated. The index finger was disarticulated at the second joint; the thumb and back of hand were then skin-grafted. The results obtained were very satisfactory considering the injury. A number of physicians who saw the hand during the first ten days advised amputation at the wrist, which would undoubtedly have had to be done except for the fact of the normal salt bath. By saving the stump of index finger and thumb, it enables the girl to have a fairly useful hand, far superior to an artificial one. I have used the normal salt bath in a number of burns and extensive infections and ulcers, with uniformly good results.

WHAT INTERFERES WITH MEDICAL PROGRESS?

What really interferes with medical progress? Primarily, it is to be plainly seen that unanimity of idea, within the medical body has something to do with this lack of greater progress. In the art of applied therapeutics, we find a vast diversity of opinion, even within the ranks of the different schools. One set of men will, and do, contend that, as a rule, drug application is practically useless, especially in the treatment of those diseases which either show recovery or the reverse within a certain anticipated period of time. On the

other hand, we find an equal number of men who will, and do, contend that drugs are of very considerable worth and that, if properly applied, to meet definite indications, will not infrequently, bring about desired results, even in the class of diseases above mentioned. In fact, this latter class has the temerity to insist that it is even possible to abort these particular diseases, if they are seen sufficiently early and if all indications are properly, and promptly met and combatted. This lack of concerted opinion, within the ranks of the medical profession has much to do with interference of real progress, more especially in the art of applied therapeutics.

Too great attention to the teachings of the authorities (?) and too little to the actual clinical observers, has much to do with much of the lack of progress. As a rule, we find that the authorities base their ideas very largely upon laboratory findings, as regards the actions of drug agents, and with but passing attention to those of a clinical nature. On the other hand, the clinician **accepts the laboratory findings**, in so far as the physiologic and toxic actions of drugs may be concerned, but **in addition**, he takes into consideration the effects of such agents, as manifested through their application to the sick human. The latter class of physicians have found that, if drugs are properly applied, certain, relatively sure, results almost invariably obtain. As many of these practical clinicians are country physicians and are not connected in any way with the numerous schools of medicine, their ideas are not, as a rule, accepted as a matter of standard, regardless of the fact that they may be able to report case after case in which certain effects have obtained, following certain causes. The physicians of the first mentioned class are, almost invariably those who pay great attention to consultation practice and who frequently fail to follow the cases pre-

senting from beginning to end. They are called in, almost invariably, to sustain, or frequently, to make the diagnosis for the practitioner who has the case in charge. They are frequently called only for this purpose, and no other and it occurs that they make absolutely no suggestions as regards treatment. Still this class of so-called authorities are very frequently loud in their denunciation of many of the therapeutic agents. Being accepted as authority upon the subject of internal medicine, we find many physicians giving attention and credence to the teachings of this class of men who are really greater pathologists and diagnosticians than doctors in the truest sense of the word. We find many accepting their teachings without question. Such action interferes with real progress in medicine. In other walks of life we find that attention is given to all associated in the particular line of work under consideration and that the ideas of the lowly are considered with as much care as are those of the men who happen to be at the head of the ranks. For this reason we find much progress made in many lines of work, both professional and otherwise, outside the ranks of medicine.

False modesty, even upon the part of many of our better educated people has much to do with medical progress. Much attention has been given to matters of personal sanitation and hygiene in many of our public and high schools within recent years, such work being, as a rule, carried on or fostered by the local medical fraternity. In a vast number of instances work of this sort has been seriously interfered with through the false modesty of the laity, especially of women. This has interfered with medical progress, especially preventive medicine, as it has allowed young men and women to go out into the world with but little idea as to how they should take care of themselves, either sexually or otherwise, the

result being, that otherwise preventable disease has occurred.

The fact that so many people object to the quarantine of infectious diseases has had much to do with greater progress in medicine. Many of the laity prefer that such diseases fasten themselves thoroughly upon a community prior to the establishment of strict quarantine. This is especially true of those who preach medical freedom so loudly, and who believe in the mystical, rather than the practical and worldly treatment of diseases. Only within a few days were we informed by an educated woman, a Christian Scientist, that the doctors were too ready to quarantine against a possible epidemic of scarlet fever in one of the larger Nevada towns. That the board of health of this town had no right to close the schools when only a very few cases of the disease had appeared. She gave as a reason that such closure of the schools, coming as it did at the time of examinations, interfered with the work of the pupils. In other words the schools should have remained open, regardless of the fact that the same condition as had previously obtained through lack of thorough quarantine, viz., a general epidemic, might have again occurred. Interference of this sort has much to do with the lack of progress in medicine. This same woman would insist most heartily upon the quarantine of diseased animals which might possibly come into the markets as food-stuffs. She would insist that all food products be properly inspected, prior to the marketing thereof, in that the health of the community might be conserved, but she would not insist upon a quarantine which would likewise favor conservation. Despite the objections of the Christian Scientists, the quarantine in this instance was very thoroughly established and maintained, with the result that a serious epidemic was avoided.

In other walks than medicine we find

that, when anything is desired, in the way of legislation, upon the part of any particular class, such class as a whole enters into the work. In medicine we find that many doctors hang back and fail to take any active part or interest in those things which would be of vast benefit to each individual member of the fraternity. They allow bills introduced within congress and the legislatures of the various states to be so mutilated as not to be recognizable when coming from the committee. They allow other than medical men to insist upon what, and what not, such bills shall cover. In fact, it is notoriously true that the doctors fail to act in concert in such matters. But few of them will endeavor to work up any interest, locally, in any such presented measures. In consequence of this we find that many bills which would benefit the laity as well as the doctors, even though passed, are so changed as to be practically inactive. This interferes with true progress in medicine. On the face of it, one would almost consider the average doctor a coward, as he is so fearful of his future that he will not assert himself, even though he may know himself absolutely in the right, for fear that he may not find all of the people within his community in exact accord with his ideas regarding the right and wrong of medical legislation.

The lack of individual study upon the part of the doctor himself, has much to do with the lack of progress in medicine. He is prone to accept the teachings of others, regardless of the fact that he may observe that all cases are not classic, and that all are not subject to relatively the same line of treatment or handling. The average doctor lacks individuality to a very considerable extent and is too frequently led by the opinions of others. In other words, he is not progressive. This lack of individual progression interferes very considerably with general medical progress, in that many ideas and find-

ings of worth never see the light of day, excepting within the minds of single men, who are fearful, because of not being accepted authorities, of promulgating them for the benefit of the profession at large.

In reading the various medical journals published, one sees that but very few of the profession have anything to say to the medical public, despite the fact that there is not a single doctor but who could report something of interest. Those who do give attention to the little things of practice are in the decided minority. Others are prone to write upon that which is of greater magnitude, capital operations and things of like sort, and without any attention to the little things associated therewith, and which, as a whole, may be of vastly more importance than is description of technic. It is the consideration of the many, many, little things which favor progress in medicine, and every doctor, no matter if he be in the wilds, should report these things of seemingly no importance. The journal devoted to highly scientific articles does not, as a rule, favor great progression, as it fails to cover the every day work of the average practitioner. But, those men who are endeavoring to secure patronage through their writing, and who are not making any great endeavor to give the average general practitioner any ideas of practical worth. Such men write for personal gain, rather than for the benefit of the whole and in consequence do not favor medical progress to any considerable extent.

It is not our idea to suggest remedies for the lack of medical progress, but to call attention to the shortcomings of the rank and file of the profession, in that they, themselves, may accept a hint and profit thereby. There are remedies and it is possible that they will be considered within the columns of this journal at some future time.

PHARMACEUTIC HONESTY.

Much is said regarding the worthlessness of drugs in the treatment of disease. It is little wonder that more fault is not found. There is not a single doctor who has not seen many cases which have not shown anticipated improvement under what has been considered the most approved treatment. The doctor has followed the observations of those of greater clinical experience than has been his, and has failed in his treatment, despite the fact that his diagnosis and understanding of the indications were practically correct. Even in some instances where the symptoms and indications were ideal and classic failure has followed.

Who is to blame for such failures? Is it the doctor? Is it because he has overlooked some little, or great, thing? Or is it because of the fact that the arms with which he has carried on his fight have been inferior? Has he been furnished with really active drugs, or with some which may have been below par when stocked, or allowed to deteriorate through long keeping?

Recently one pharmaceutical house, handling one or more of the imported chemicals popular in this country, took it upon itself to prosecute certain re-retail druggists who were guilty of employing inferior substitutes. This is a move in the right direction. But what of those druggists who buy other than the proprietaries, the fluid extracts, tinctures and other simples and carry them year in and year out, until such time as they may be ordered on prescription? What of those druggists who purchase cheap supplies of this sort? Should they not be prosecuted as well as those who handle and sell substitutes?

Recently there came under our observation a case of mitral incompetency in which digitalis was as assuredly indicated as could be possible. We wrote a prescription for the infusion of the

drug and found later that this preparation had been made from the fluid extract and not from the leaf. Although the prescription was employed regularly for a period of three weeks there was but little improvement. We happened to have a proprietary digitalis product on hand which we substituted for the previous prescription and from which we obtained pronounced drug action within a very few days. The fluid extract from which the infusion was made we found had been on the shelf of the druggist for two or more years and was undoubtedly worthless.

On another occasion we saw a druggist making a tincture of colchicum from a fluid extract which had been in stock for upwards of twelve years, to our certain knowledge, and probably longer. Could the doctor employing such a product be sure of any assurance of colchicum action from it? We believe not.

Not long ago we desired a test solution, containing liquor potassa, made for our laboratory. The solution was made, but was far from standard; so far in fact, as to be worthless in obtaining a reaction. While this was not a pharmaceutical product, it had to do with the perfection of diagnosis and treatment of the sick. It was a dishonest product, in that it was dispensed in a condition far below standard, and had it not been discovered, might have worked havoc with our case.

It is undoubtedly a fact that the majority of failures charged to doctors are primarily due to the ineffective drugs employed in compounding prescriptions, and not to ignorance as to the proper knowledge of indications. In times past, when the majority of abnormal conditions were treated as diseases as a whole, and without attention to individual indications, it is probable that many of the failures were chargeable to the doctor, but not today, when the disease is forgotten and the indications met, as they arise.

The druggist would have us write prescriptions for every drug we employ, in that he may have his profit from our cases, but he does not, through honesty, in a vast number of cases, make any great endeavor to give us such drugs as will prove highly effective. We do not say that all druggists are dishonest, or that any of them are intentionally so, but we do believe that there is room for marked improvement throughout the entire trade. Many druggists are prone, because of lower price, to buy many things in quantity. By so doing they undoubtedly stock many articles which may remain upon their shelves indefinitely. Such goods may have been standard when purchased, but far from standard when sold. While this may not be considered as direct dishonesty, it is so indirectly, and both the doctor and patient suffer, the former through loss of practice and the latter through not being restored to health.

The doctor should insist that his patient be given drugs of the highest possible activity. He should insist, if he be writing prescriptions that none should be filled with drugs of great age, or with substitutes for known active drugs or chemicals. If he cannot obtain service of this sort he will be obliged to stock his own drugs, in that he may know that his patient is to obtain just the agent indicated, and that of the highest possible activity.

We find many druggists objecting because of the fact that doctors, who have, for a time, given them their patronage, have withdrawn from prescription writing and taken up dispensing. Such druggists, in practically one hundred per cent of instances, are wholly and solely to blame for such conditions. They have, through shortsightedness and the desire for larger profits, been dishonest in compounding.

While it means a considerable investment to the doctor to stock his drugs

and dispense, this undoubtedly is the only avenue through which many of the profession will meet with therapeutic success. If the doctor cannot obtain good, honest drugs through the medium of prescriptions he should dispense. His success depends wholly upon his results and regardless of the fact that it has been said by the druggists that the doctor is prone to employ cheap drugs, when dispensing, he undoubtedly is obliged to use those which will be active in meeting the indications, otherwise he will be a failure.

We recently met a doctor who for years prescribed every drug he employed. During that period his successes were of a mediocre sort. Feeling that he was not obtaining the proper drugs from the druggist, he began dispensing, with the result that he has become markedly successful. We do not believe that the doctor and druggist should be at continual war, but we do believe that the former should insist upon a square and honest deal. Else he should dispense.

NEVADA STATE MEDICAL ASSOCIATION ADOPTS.

(1) A Certificate of Health Before License to Marry.

(2) The Serilization of Criminals and Defectives.

(3) Making the Wilful Communication of Venereal Disease a Felony.

(4) Prohibition of the Advertising of Gonorrhea Cures.

We congratulate the Nevada State Medical Association upon the adoption of resolutions at the recent annual meeting dealing with these very important subjects. The states of Nevada and Utah have been very closely associated in the past and their interests in recent years have become even more interwoven in consequence of the opening up of the southern parts of both states by the Los Angeles and Salt Lake railroad. Our people served by that

line naturally gravitate to Salt Lake City and as a result, we, of Nevada cannot but be interested in the things which make for the common good of both states. We feel, therefore, that our association has done well and we trust that the bills to be introduced into the legislatures of Nevada and Utah along the lines of the resolutions will receive the active support of each member of the profession. A bill requiring a Certificate of Health before Marriage is being introduced into the Colorado senate by Mrs. Helen Ring Robinson, state senator-elect. We are, therefore, in good company, and we ask each reader not only in Nevada, but also in Utah and Colorado to constitute himself or herself a committee of one to see to it that each representative and senator is interviewed and instructed as to the objects aimed at by eugenists and thus shown the necessity for the passage of these bills. They are being formulated with the view of protecting innocent wives and unborn infants as also our growing boys and girls from venereal disease. Each bill will drive a nail into the coffin of public prostitution and will enable parents and others to fight with greater success the evils of clandestineism. Our health boards are waging an unceasing fight against minor diseases, such as typhoid, tuberculosis, diphtheria, scarlet fever, small pox, etc., let us strengthen their hands by giving them such extended powers as may be necessary to overcome and protect us in our homes, and on our public streets from the ravages of diseases still more protean and disastrous to the children of men—the black plague of syphilis and gonorrhea,—whose victims are the child bearing women, the unborn infant and our loved sons and daughters. No punishment is too severe for traffickers in this sin against the human body. Our cousins across the water have learnt the efficacy of “flogging” for brutalities against the helpless. On the 14th of this past month the King signed

a bill instituting "flogging," the historic "Cat-of-nine-tails," as part of the penalty in cases of those convicted of dealings in the "white slave" traffic. This suggestive note is added: "There has since been a considerable exodus of men engaged in this business to the continent." So with the passage of laws such as are sought for in these

resolutions, the fear of the strong arm of the law would strike in so many directions that those financially interested in public prostitution would seek other pastures, and our police could the better direct their attention to clandestianism, the *fons et origo* of these venereal diseases—the social evil.

WHAT HYGIENE CAN DO.

By JOHN N. HURTY, M.D., Secretary Indiana State Board of Health.

Luck is with the doctors of Nevada and with Nevada Medicine, due to the fact that Dr. John N. Hurty has become one of the Associate Editors of the Nevada Section of this journal. Dr. Hurty, as Secretary of the State Board of Health of Indiana, has done much to improve both the physical and moral welfare of his own, as well as other states. We feel sure that he will give impetus, through his contributions, to better things in Nevada. He is not a dreamer, but a remarkably practical man, and we feel sure that anything from his pen will prove of vast value to the people of this state. We take more than passing pleasure in publishing his initial article, which we believe, if followed in Nevada will do much to advance the state in every possible way.—Ed.

Prof. Hugo Muensterberg of Harvard University says: "Hygiene can prevent more crime than any law." This would certainly be doing a great deal. But how can hygiene do such a great service? First, what is hygiene? It is defined as: "The science which teaches how to secure and preserve health." From this we may decide that crime, to a considerable degree, attends ill health and sickness. And this is true. A careful study of criminals discloses the fact that they are generally somewhat mentally weak, generally physically defective or suffering from disease. At one time we thought insane people were "possessed of the devil," and they were put under the care of priests to drive out the devil, and treated cruelly, sometimes, with great and horrid cruelty. This was ignorance. Hygiene finally made it plain that insanity was a physical ill; the insane were sick. Then we put them under the care of doctors (hygiene) and treated them kindly. For a long time it was believed that insanity could be cured in most instances, but at last we know it rarely can be cured. Now hygiene offers to prevent insanity, but the people laugh at microbes and health cranks and go on building insane hospitals at the cost of millions and millions instead of spending hundreds on pre-

vention. Let us hope they will get tired of this extravagant and unscientific method some day, and try prevention. The prevention of crime and the prevention of insanity lie pretty much along the same hygienic lines. Both are not infrequently due to acute or chronic sickness. There is a young man in the penitentiary who stole a blanket and some eggs for his mother who had typhoid fever. Disease led to this crime. Another man had consumption, he was weak and could not work, and so stole clothing and food. He was driven to crime by disease. There is a certain disease which is acquired in sin and which is all too common among criminals, and in scores of instances this disease has led its victims to commit crime. This disease, hygiene knows how to prevent. But hygiene seems unable to secure the attention of the people and so they endure sickness unnecessarily and spend millions and millions for the cure of disease and for punishing criminals, with no lessening of sickness and no lessening of crime. And, strange to say, this condition exists, when every one professes to believe that one ounce of prevention is worth a pound of cure. Hygiene knows how to prevent typhoid, consumption, and a host of other diseases, and gives the knowledge

without money and without price, and yet the knowledge is not practically applied. It is safe to say that if consumption only were prevented—and hygiene knows how to do it—twenty to thirty per cent of criminal acts would be prevented at the same time. Some writers say fifty per cent. The prevention of consumption would also prevent considerable insanity, for consumption is no small factor in the causation of insanity.

Eugenics is a branch of hygiene. The word means well born. Every person has observed that crime and insanity frequently appear in families which exhibit odd qualities. The strain of insanity and the strain of weak will power leading to criminality, is in certain persons. Eugenics contends that such persons should never marry and should never have children to inherit their defects. Eugenics, therefore, would forbid the marriage of those adjudged to be morally, mentally or physically defective, provided the strain was in the blood. Yes, more than this, "all such," Eugenics says, "should be sterilized." But it is objected to,—“how can hygiene know when moral, mental and physical defects are in the blood and hence hereditary? In answer it can be said. We know with certainty in many instances by the acts of the individual, in others by certain physical and mental characteristics, and by investigation and scientific study more can be learned. The tests for unfitness for parentage, would probably not miscarry to any greater degree than justice now miscarries in our courts. Of course, more objections than how to discover who should be sterilized can and will be found, but science can finally answer them. Very probably it would be found unconstitutional, for the lawyers generally find most measures for saving the country and uplifting the race, to be unconstitutional. But even unconstitutionality can be overcome, and will be, whenever the people once get headed in the right direction. Yes, Prof. Muensterberg is right, "Hygiene can prevent more crime than any law."

And, in the words of King Edward: "Let us prevent."

Governor Marshall said in his address to the health officers at Indianapolis: "Gentlemen, make Indiana cleaner for us, make it healthier, and I guarantee to you that you will cut off fifty per cent of the crime and you will have largely increased the Christian character of the citizens of Indiana."

MENTALLY DEFICIENT CRIMINALS.

It was stated on behalf of a prisoner, who was charged at the Thames Court, England, with theft, that he had a mania for stealing.

Mr. Dickinson said he was asked to take the matter into consideration when dealing with the case. He was truly sorry for the poor fellow, who had been previously convicted, but the tradesmen had also to be protected. There ought to be a home or a colony for men of this class.

It was to be earnestly hoped that Parliament would give the subject their serious attention. Prisoner was mentally deficient, but not mad. He was compelled to send him to prison for three months, where he would be looked after.

ENGLAND TO FLOG WHITE SLAVERS.

The royal assent has been given to a bill just passed by parliament instituting flogging as the penalty in case of convictions of "white slave" traffic. The Scotland Yard authorities are now organizing a special staff of plain clothes officers, who will enforce the act.

During recent days there has been a considerable exodus of men engaged in this business to the continent, especially to Paris.

HUMORETTES.

SLOW IN COMING.

James Whitcomb Riley was once lamenting to a woman friend upon the poor pecuniary returns from literary work. "But surely," said the lady, "you have no reason to complain, Mr. Riley. I understand that you get a dollar for every word you write." "Y-e-e-s, madam," drawled Riley, "but sometimes I sit all day and can't think of a damn word."

INFALLIBLE TREATMENT FOR THE PREVENTION OF FALLING OF THE HAIR.

(A highly original formula contributed by J. Cuneo, M. D.)

Dissolve in one litre of boiling water two kilogrammes of best carpenter's glue, and with a stiff brush paint freely all the head and let dry in the sun. Repeat twice a week, and your hair will never fall any more.

MISCELLANY

Auto-Intoxication.—Auto-Intoxication, due to the retention of waste and toxic products by the organism has long been recognized as a potent factor not only in the causation of many of the so-called disorders of metabolism, but also in the etiology of countless infections. Organs and tissues weakened and depressed by an excessive burden of metabolic refuse naturally lose much of their power of resistance as well as their functional activity, and fall easy prey to attacking hordes of bacteria.

Real elimination not merely from the bowels but from every cell and tissue is, therefore, the secret of arresting many diseases in their early stages and restoring the body to health and vigor.

Many and various are the measures that have been brought forward, but none has ever met the needs like iodine or its preparations. But effective as iodine has been found in many cases, too often certain drawbacks manifest themselves when it is administered in its ordinary or usually employed forms. As a consequence, iodine has been denied to many a patient who needed it urgently.

Administered in liberal dosage—10 to 20 minims well diluted, 3 or 4 times a day—its eliminative action is soon manifested. Rapidly the accumulated waste products are removed from the remote tissues, the urinary solids are surprisingly increased, the glandular functions are stimulated, the skin becomes more active and only a mild laxative is needed—*cascara sagrada*, for instance—to insure the withdrawal of large amounts of waste material from the alimentary canal.

Results tell the story and one has only to observe the notable effect in one of these cases of auto-intoxication to be convinced that in Burnham's Soluble Iodine the medical profession has a remedy that can be relied upon to free the system from the ashes of metabolism.

Digipuratum.—By Dr. Leo. v. Siebenrock. (*Klinisch-therapeutische Wochenschrift*, 1912, No. 9). The author finds that relatively large amounts of the active principles of digitalis may be introduced per os in the form of Digipuratum. In this way a rapid and reliable effect is obtained, without any disagreeable after-effects on part of the stomach. In the severest grades of cardiac

insufficiency, 8 comminuted tablets of Digipuratum were given at once. This dose was frequently repeated for several days in succession.

The author is also convinced of the prompt and reliable effect of Digipuratum injections. In order to obtain a rapid and permanent effect, it is best to inject a dose of 4-6 Cc. of Digipuratum into the muscles. If done properly, the pain is very slight, but the effect is prompt. If the patient is very sensitive, 0.01 morphine may be added to the solution, when the injection will be absolutely painless. The author never injected less than 4 Cc. intramuscularly and he regards 6 Cc. as the maximum dose. A bigeminal pulse may result from 5 Cc. but the therapeutic effect was never interfered with. For intravenous injections 2-3 Cc. will suffice and the effect will be almost instantaneous. The solution of Digipuratum has a more permanent effect than solutions of strophanthin. Injections of the latter drug sometimes cause fever, which is never the case with Digipuratum. (From the First Medical Clinic of the University, Vienna (Chief: Prof. C. V. Noorden.)

THE FANFARE OF THE FOURFLUSHER.

Sometimes it becomes our painful duty to call attention to the "things that ain't so." The Maharajah of our esteemed Contemprary, Colorado Medicine, has for some months carried in bold black type the following statement: "Colorado Medicine Accepts the Advertisements of No Pharmaceutical Products Unless They Have the Approval of the Council of Pharmacy and Chemistry of the American Medical Association." During the same period, among the three (3) medicinal advertisements in Colorado Medicine, that of Horlick's Malted Milk appears. Horlick's Malted Milk is an excellent and unobjectionable product, but it is not listed among the preparations sanctioned by the famous Council, as detailed in the 1912 edition of "New and Non-Official Remedies," although peptonoids and other food products have received official approbation. *Risum teneatis, amici?*

Army Medical Corps Examinations.—The Surgeon General of the Army announces that preliminary examinations for the ap-

pointment of First Lieutenants in the Army Medical Corps will be held on January 20, 1913, at points to be hereafter designated.

Full information concerning these examinations can be procured upon application to the "Surgeon General, U. S. Army, Washington, D. C." The essential requirements to securing an invitation are that the applicant shall be a citizen of the United States, shall be between 22 and 30 years of age, a graduate of a medical school legally authorizes to confer the Degree of Doctor of Medicine, shall be of good moral character and habits, and shall have had at least one year's hospital training as an interne, after graduation. The examinations will be held simultaneously throughout the country at points where boards can be convened. Due consideration will be given to localities from which applications are received, in order to lessen the traveling expenses of applicants as much as possible.

The examination in subjects of general education (mathematics, geography, history, general literature, and Latin) may be omitted in the case of applicants holding diplomas from reputable literary or scientific colleges, normal schools or high schools, or graduates of medical schools which require an entrance examination satisfactory to the faculty of the Army Medical School.

In order to perfect all necessary arrangements for the examination, applications must be completed and in possession of The Adjutant General at least three weeks before the date of examination. Early attention is therefore enjoined upon all intending applicants. There are at present thirty-five vacancies in the Medical Corps of the Army.

Winter Colds.—There is nothing that will remove a tendency to colds (nasal catarrhs, bronchitis, laryngitis) more quickly and satisfactorily than a course of treatment with Gray's Glycerine Tonic Comp. Its effect is not only to promote reconstructive metabolism and thus enable the whole body to better withstand disease, but in addition, it imparts a local effect to the respiratory structures that unquestionably increases the local resistance to bacterial invasion. One thing is certain, cases of the ordinary respiratory diseases not infrequently prove intractable to all treatment until Gray's Glycerine Tonic Comp. is administered. Experience has proven this, and there are count-

less physicians who use this dependable tonic exclusively for clearing up their cases of pharyngitis, laryngitis, bronchitis and allied conditions.

Post-Grippal Treatment.—In nervous exhaustion resulting from la grippe nothing equals Cord. Ext. Ol. Morrhuæ Comp. (Hagee) in tablespoonful doses before meals for adults.

Recovery of strength rapidly ensues, and relapses, so common in this disease, are prevented.

To Cleanse the Bowel.—"Castor oil as commonly sold, is an excellent grease for wagons or heavy machinery, but to cleanse the alimentary tract of a human being, laxol has for many years been my first and only thought." So writes Dr. T. B. Van Alstyne, of Bingham, N. Y. The doctor's opinion is worthy of attention, for it is based upon an experience covering several years. Laxol is pure Castor Oil, highly refined, bland, unirritating and "sweet as honey."

Tongaline.—"Many cases of acute coryza and naso-pharyngeal irritation are often due primarily to the streptococcus rheumaticus and respond to the usual rheumatic therapy."

In these cases, commonly called "colds," generally deep-seated, painful and exhausting, Tongaline mitigates the congestion and by rapid elimination of the poisons or germs promptly relieves a condition often very obstinate and if not corrected within a reasonable time, attended with serious results and always with a tendency to become chronic.

For special stimulation to the kidneys, Tongaline & Lithia Tablets; if malaria is indicated, Tongaline & Quinine Tablets.

Digipoten.—Speaking of this product, Dr. Alben Young, a prominent physician of Chicago says:

"Having now used Digipoten for several months, I am prepared to say it is a wonder—the very best digitalis preparation I have ever used. It gives me marked, prompt and positive results. In my experience, a good dose night and morning, giving each plenty of time to get in its work, produce just the results I want—better, because more controllable, than when given with greater frequency

"I have a number of heart-patients who feel, as they express it, that they couldn't

live if they didn't have the little green tablets."

Samples and booklet sent on request by The Abbott Alkaloidal Company, Chicago.

Pituitrin in Difficult Parturition.—Every physician who has any considerable obstetrical practice owes it to himself and to his patients to familiarize himself with the oxytocic function of Pituitrin. Here is an agent which, according to reports in the medical journals of the Old World (notably of Germany)—if obstetricians adopt it generally, as now seems likely—is destined to rob childbirth of much of its pain and terror. What shall we say of such an agent that fails but once in over a hundred cases in which it is used? And that is just what happened in Dresden, according to a report of Vogt, of the Royal Gynecological Clinic of that city. Vogt adds: "It was not necessary to have recourse to forceps in a single instance in which Pituitrin was employed."

For the benefit of physicians who are uninformed on the subject, it may be said that Pituitrin is an extract of the posterior or infundibular portion of the pituitary gland. While in use for a number of years—chiefly, perhaps, as a hemostatic and heart stimulant—it is only of late, comparatively speaking, that its value in uterine inertia has been fully understood. The product is prepared and marketed by Parke, Davis & Co., to whom inquiries should be addressed for further particulars of this remarkable agent. Not very long ago the company issued a pamphlet in which a number of interesting and surprising case reports were published. We understand that copies of this Pituitrin pamphlet are still available and may be obtained upon application to Parke, Davis & Co., at their general offices in Detroit, Michigan.

H-M-C. (Abbott).—Millions of doses have been used by doctors in the field during the last four years—incontestable proof that it actually is what we claim and is doing good work. And what we claim is just this: (1) H-M-C is the best and safest pain-reliever one can use; (2) it is an excellent sedative—try it in delirium tremens, acute mania, etc.; (3) it is a godsend in obstetrics; (4) it is the safest of anesthetics, displacing ether and chloroform to advantage, either wholly or in part. Send for sample and booklet of particulars. You'll be glad you did! The Abbott Alkaloidal Company, Ravenswood, Chicago. Branches: Seattle, San Francisco, Los Angeles, Toronto, Bombay.

AND CASEY CAME BACK.

They tell the following as a story that the late J. T. Harahan, former president of the Illinois Central Railroad, was fond of telling on himself:

Mr. Harahan was sitting in his office one day, while president of the road, when a burly Irishman entered the office.

"Me name's Casey," said he. "Oi want a pass to St. Louis. Oi worruk in th' yar-rds."

"That is no way to ask for a pass," said Mr. Harahan. "You should introduce yourself politely. Come back in an hour and try it again."

At the end of the hour, back came the Irishman. Doffing his hat, he inquired:

"Ar-re yez Mr Harahan?"

"I am."

"Me name is Patrick Casey. Oi've been workin' out in th' yar-r-ds."

"Glad to know you, Mr. Casey. What can I do for you?"

"Yez can all go to hell. Oi've got a job an' a pass on th' Wabash."—(Everybody's Magazine, July, 1912.)

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**A good thing to remember
when treating pneumonia.
Sample on request.**

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Denver Medical Times

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THE PRESIDENTIAL ADDRESS.*

DR. WM. H. DAVIS,

Denver, Colo.

Mr. President and Fellow Members of the Medical Society of the City and County of Denver:

Words cannot express my appreciation and thankfulness for the universal kindness and assistance received from the officers and members of this Society during the past year.

The Board of Trustees has inaugurated and put into practice a very complete system of business-like principles for the business part of this society, and everything has been running as satisfactorily as could be possible.

Our noon-day luncheons at the Savoy Hotel have had a very good effect; the opportunities thus afforded for a more intimate acquaintance, and the good-fellowship developed at these meetings have been very apparent. It is to be hoped they will be continued.

Our membership committee has not been as active as we had hoped for. Their brilliant work last year in securing members had led us to expect a continuance of their activity.

There is yet some good material outside if properly approached and told of the good work being done in this society, and the magnitude of our library, who should be induced to take advantage of the opportunities thus afforded by belonging to and being active in such a society as ours.

The pathy is going out of medicine; the breaking down of sectarianism that has so long kept alive the so-called schools in the medical profession is not so popular now as it has been in the past. There is a general feeling all over the country among the more intelligent and qualified that it is time to get to-

gether into a common brotherhood of humanitarians for the benefit of mankind.

All non-sectarian, ethical, legal practitioners are eligible to membership in our medical societies.

Our library has about 12,000 volumes; some of these are duplicate copies, but all have been classified and listed, and there are now about 7,700 books on the shelves ready for quick reference. The library is now receiving about 170 of the best medical journals from at home and abroad. It is one of the most complete and well managed libraries in the country and should be the pride of this membership.

We have recently received endowment donations of \$5,500 in cash from the Denver and Gross College of Medicine, and \$1,200 in cash and securities (the Eskridge donation), and other property from the Denver Academy of Medicine. We hope these donations may be considerably increased during the present year.

This, with other donations from the Denver and Gross College of Medicine to the library, brings the assets of this Society to a very respectable figure.

The final transfer of all the property of the Academy of Medicine to this society has been effected.

Six members of this society have died during the past year. All were valued members and not only a loss to this society, but to the community at large:

Dr. R. A. Hammill, died Feb. 9, 1912.

Dr. H. S. Isaacs, died Feb. 19, 1912.

*Presented before the Medical Society of the City and County of Denver, Jan. 7, 1913.

Dr. J. C. Hutchison, killed July 11, 1912.

Dr. H. S. Denison, died Aug. 24, 1912.

Dr. W. H. Buchtel, died Oct. 14, 1912

Dr. J. D. Barry, died Dec. 28, 1912.

The subject I have chosen for my paper this evening is older than history itself:

A Few Landmarks in the History of Syphilis.

Professor Pollet of Lyons is probably the best known authority on prehistoric syphilis. He thinks the disease can be traced back to a very remote period in Chinese history.

He states that Captain Dabry, French Consul at Hong Kow, published a very complete work on Chinese Medicine in 1863, translated from secular manuscripts which escaped being burned by Emperor Tsin-Che-Ho-Nang. From these manuscripts we learn that the first Emperor of China was Chin-Nong, who lived in 3216 B. C.

About 2637 B. C., appears the name of Hoang-Ty, Emperor of China. It was he who caused all medical documents to be collected and reduced to writing, making the medical treatise of Hoang-Ty-Mi-King.

From this work of more than 4,500 years ago we learn that the Chinese knew much of the venereal diseases, and from it we get a description of a lesion that spread through the blood and for which mercury rubbed up in oil was used as an inunction. Hoang-Ty also speaks of the coppery red spots, headaches, nocturnal pains and throat affections so commonly seen in syphilis.

It is almost certain that the "yaws" of Africa is identical with syphilis. This disease was pointed out by the Arabian physicians as early as the 10th century. The disease at the present time is interesting from the fact that it is caused by an organism identical with that of the spirocheta pallida, and gives a positive Wassermann reaction.

Excavations made in 1867 at Solutre, in the Province of Saone et Loire, France, show bones of reindeer, horses, cut flints, etc., belonging to the Gallo-Roman-Merovingian epoch; and in 1872 the Abbe Ducrost found a skeleton of a woman, both tibias of which showed exostosis, said by Broca, Ollier, Parrot and Virchow to be due to syphilis, and that the skeleton could be referred to the Stone Age.

There is much evidence that the disease existed in France before the 7th century. Pieces of skulls and teeth taken from the Celtic dolmens and caverns of Lozere show undoubted lesions from syphilis.

From Dr. F. Buret we learn that two papyri have been found in Egypt relating to medicine; one of these is now in the Berlin Museum, published by Chabas in 1867. The other was brought by Prof. Ebers from Luxor, and published in 1875. This later papyrus was begun by King Thoth, and after his death was continued by King Sucet. It dates back to the reign of Rameses II. This papyrus is about 3,000 years old. It gives an account of lesions common in syphilis, such as inflammations, fissures and vegetations about the muco-dermal junctions, and this, with other conditions, leads one to believe it was syphilis.

The Hebrews called it the plague of Baal-Poer.

In 1451 B. C., Moses caused about 24,000 men to be put to death that the plague might be stayed, and it is said that almost that number of women and children were later put to death for the same reason.

In 1921 B. C., Abram and his wife Sarah went down into Egypt, on account of a famine in their land. Sarah was very beautiful and Abram passed her off as his sister (which was in part true, she being his half sister by paternal relation), that his life might be saved. The Pharaoh took Sarah to himself, and the Lord visited upon him

a great plague, which was undoubtedly syphilis.

It is said Abimelech, King of Geurar, one of the principal cities of Palestine, did the same in appropriating Sarah to his harem, and he also contracted the disease.

King David evidently had syphilis. He cried unto the Lord, saying: "My loins are filled with a loathsome disease, and there is no soundness in my flesh."

Hippocrates, writing about the middle of the 5th century B. C., speaks of ulcerations of the mouth, swellings of the groins, pustules and other sores.

Galen, during the second century A. D., in his encyclopedia, mentions callosities, boils, vegetations, tubercles, and involvements of the mucous membranes, osteocopic pains and other symptoms common in syphilis.

In Japan, the Emperor Haisan-Tanno decided to follow the example of Hoang-Ty in collecting all manuscripts, books, etc., pertaining to medicine as far back as possible. This work was delegated to two of his physicians, and completed about 808 A. D., but was lost and not found for more than a thousand years. It was found by a shopkeeper in the Province of Bungo, on the Isle of Kinshen. It was a well-preserved manuscript in the pagoda of that country.

This manuscript was returned to the proper authorities, and has been carefully examined by Dr. Kayama, a physician of Kioto, who studied in Leipsic, and pronounced it genuine. He found two chapters which treated of syphilis.

In America, the disease is mentioned in the early history of Mexico and Peru. It was recognized 300 years before Pizarro conquered the capital of the Incas.

There is a mythological tradition taken from Fracaster's poem, in which he states there was a shepherd whose name was Syphilus, who tended the innumerable flocks of his King, Alcitous.

He blasphemed the Gods for supposed injury to his flocks, and the disease was sent upon him for punishment. His being the first case in these parts, the disease was called syphilis.

There is little question but that syphilis has been prevalent the world over from early periods, and that it must have come to this continent with the early Asiatic invasion, which is supposed to have made up the prehistoric or early races that inhabited the western hemisphere.

There has been a number of very deadly epidemics from this disease under different names.

In the middle ages there was a general eruptive disease called "lepra," that was propagated along with other venereal disorders; this was probably syphilis.

In 1490-99, an epidemic prevailed throughout Europe; it was called "great pox." From accounts of its description there is little doubt of its being syphilis.

This epidemic was spreading through Europe at the time Columbus returned from his discoveries in the West Indies, and it has been claimed that his sailors imported it from America, where they had contracted it from the American Indians. Others claimed that the epidemic started among the French soldiers during the siege of Naples in 1490-95. To such an extent did it rage through Spain in 1494, that hardly a family was free from it. In Seville, the cases became so numerous that a special hospital was opened there in 1497.

During 1494, the whole of Italy was affected, the disease spreading from town to town.

In 1495 Germany and Switzerland had serious outbreaks.

Holland and Greece suffered in 1496.

England and Scotland felt its heavy hand in 1497.

Russia and Hungary in 1499.

In 1496, a decree from the French

Parliament required all infected persons to leave the city within twenty-four hours.

At the beginning of the treatment of the epidemic at Naples during the siege, the mortality was very large. Most of the victims died from the want of care.

Sixty years after this epidemic, syphilis was known as it is today, to be a separate and distinct disease, and not due to a multiform infection that Hunter and others attributed to all venereal diseases later. This confusion was not corrected until about the middle of the 19th century (1852).

This gave rise to the two schools known as Unicists and Dualists. As to the cause of syphilis, Lessar, in 1905, stated that there have been 125 established causes given for syphilis during the past twenty-five years. But the discovery of the *spirocheta pallida* set all previous theories at rest.

On the evening of May 17, 1905, at a meeting of the Medical Society of Berlin, a paper was presented by Schaudinn and Hoffman on the true specific germ of syphilis—the *spirocheta pallida*, and microscopic specimens were presented.

In the early history of the treatment of syphilis, the Chinese, from all accounts, are supposed to be the first to have used mercury, but mercury was probably first introduced in therapeutics by the Arabs, but for external use

only, for pediculi, scabies, impetigo, and other skin troubles.

In 1533, the first mercurial pill was used but was discontinued on account of a stomatitis that followed.

When mercury was again resumed, it was in the form of inunctions and lotions. In 1473, Van Swinton used bichloride of mercury in solution.

In the early part of the 19th century mercury was again used in pill form. Dupuytren extolled $\frac{1}{8}$ grain bichloride of mercury, and Ricord and Berth the proto-iodid.

In 1832-36, Wallace, of Dublin, brought iodide of potash into use and fixed the dosage, pointing out its indications. His experiments began in 1832, and led up to the publication of his results in the form of lectures at the Dublin Hospital in 1836, one hundred and thirty-nine patients having been observed. Since that time mercury and iodides have been used as the so-called specifics in the treatment of the various stages of syphilis.

Mercury was first used subcutaneously by Hebra and Hunter.

The finding of the *spirocheta pallida* in 1905 by Schaudinn and Hoffman; the development of a fairly reliable blood test, such as the Wassermann and other modifications of his reaction in 1906-7; and Ehrlich's gift of salvarsan to the world in 1910, have brought a new epoch in the history and treatment of syphilis, that is familiar to you all.

CASES OF MERCURY POISONING.

T. E. CARMODY, M.D.,
Denver, Colo.

During the last two decades cases of mercury poisoning have been rare, due largely to the fact that calomel is being given in much smaller doses and with greater caution than it was twenty or thirty years ago. We have seen cases caused by taking bichloride solutions,

either by mistake or with suicidal intent, but these are necessarily rare. In the treatment of syphilis with bichloride, poisoning very seldom occurred, neither did poison symptoms appear in cases where inunctions were used, and I am not aware of any cases caused by

the use of the succinimide, although such may have occurred.

However, the use of grey oil, or metallic mercury triturated with some oil, has been attended with dangers, either because of carelessness in its use as regards dosage, or extending over too long a period. In the latter case I believe the explanation of poisoning is that the early doses become encysted and are discharged into the circulation simultaneously with the later doses, while the physician believes he is not getting the desired effect early in the course of treatment because absorption has not taken place.

The author has seen four cases of mercury poisoning in the last few months, three of which were due to the maladministration of grey oil.

Case I: Mrs. H., Irish-American, stenographer, age 28, consltd me Dec. 7, 1911, giving a history of syphilis dating back ten years. She claimed, however, that as she had taken treatment at the time of infection and had made several trips to Hot Springs, Ark., that no symptoms were present at the time treatment was instituted. She said that she was advised to take treatment on account of a positive Wassermann. She had been given $2\frac{3}{4}$ c.c. of 50% grey oil during a period of one month, beginning Oct. 21, 1911, the first injection being $\frac{1}{2}$ c.c. This I was able to confirm by seeing the original records of the physician giving the treatment.

The patient had lost eleven teeth from both jaws, the right side being the most affected. Considerable of the alveolar process was denuded. She had been under the care of a dentist, who had removed several pieces of the bone with the teeth. The mucous membrane was bluish in color, but not ulcerated, except around the teeth and alveolar process. There was an excessive flow of saliva, which had continued for about six weeks. The patient asserted that she had lost about 40 pounds in weight;

she appeared emaciated, and the skin had a transparent, bluish tinge.

She remained under the care of her dentist until Dec. 15th, when she again consulted me, and was advised to enter a hospital at once. She entered Mercy Hospital, Dec. 16th. Her temperature at 4 p. m. was 101.1-5; pulse, 96. The cavities left in jaw after removal of the sequestra and the teeth were washed with bicarbonate of soda solution and packed with iodoform gauze. The mouth was syringed frequently with soda solution, and the dressings were changed twice daily.

The patient had been taking potassium iodide since first seen on Dec. 7th, in order to change the mercury into a more readily soluble salt and to hasten its removal from the body. The gums had also been painted with tincture of iodine for the same reason.

Examination of the urine, Dec. 17th, showed it pale in color, acid; sp. gr., 1010; heavy ring of albumin, some coarsely granular casts, some pus and epithelial cells, no mercury.

On the 18th it was practically the same.

On the 19th, pale, acid; sp. gr., 1004; many granular casts, few pus cells, many epithelial cells, and gave mercury reaction.

Dec. 20th, practically the same but no mercury.

Dec. 22nd, saliva was tested for mercury, but none found.

All bowel movements were watery, slate-colored, and contained shreds of mucous membrane; later they contained pieces of membrane.

She was given urotropin in five-grain doses every four hours, strychnia 1-30 every four hours, and codein to relieve pain.

On Dec. 18th she was seen by Drs. Freeman and Kenney.

Dr. Kenney reported, on examination, finding a dilated heart, with very weak sounds. He recommended digi-

talin 1-100 in addition to what was being given.

Dr. Freeman suggested salt solution by bowel. This was tried but as the patient was unable to retain it, it was discontinued after twenty-four hours.

The nourishment consisted of eggnog, beef juice and egg albumen.

She gradually grew weaker, and died after slight exertion in rising in bed on Dec. 25, 1911, probably from acute dilatation of the heart.

Case II: Miss A. G., a woman of the half world, was referred by Dr. Witney, and consulted me Feb. 13, 1912. History of infection twelve years previous; loss of some bone from the nose and left central incisor one and a half years ago. She had received injections of "some grey material" from the latter part of September, 1911, to December 15, 1911, and stated that she had received twenty-five of these injections. After this she was in bed three weeks, and lost about twenty-five pounds.

At present she feels well except for discomfort in the oral and nasal cavities, but complains of weakness and has not regained weight.

Examination Feb. 13, 1912, mucous membrane of the mouth deep red and ulcerated along the alveolar margins, with great amount of ulceration in the region of the left upper central and lateral incisors, the latter of which was lost two weeks previously. The bone was exposed on the floor of nose, although the septum was intact. The inferior turbinates, especially the left, had almost entirely disappeared.

She was put upon potassium iodide and the gums and left anterior portion of the nose were painted with tincture of iodine once a day, and she was ordered to remain in bed.

The urine was examined by Dr. Hill on Feb. 17th. It showed reaction acid, sp. gr., 1016; and just a trace of mercury (about one part in a million). Moderate sediment, mostly urates, with a good many vesical and vaginal epi-

thelial cells, and a few red blood corpuscles, no casts.

The stools were grey and contained some shreds of mucous membrane.

On February 27th, the whole of the left portion of the premaxilla was removed, and, although the other portions of the mouth showed improvement before this, recovery from this time on was rapid.

About the middle of March an injection of salvarsan was given the patient intravenously, without my advice or consent, and so far as possible to judge, neither benefited nor interfered with healing in the mouth.

She was last seen June 20, 1912. and mouth, nose and throat were apparently in normal condition.

Case III: Miss C., age 32, referred to me by her dentist, Dr. Waddell, March 6th, 1912, account of an extensive ulceration of her mouth. A large ulcer was found in the region of the left upper first, second and third molars; the left third molar had been extracted ten days previously, and denuded bone could be felt in socket. The left lower second bicuspid was quite loose, the gums around it being badly ulcerated.

The following history was obtained: The patient was infected during September, 1911, and first noticed sore throat during October, 1911, when she consulted a physician. Treatment was instituted, consisting of injections of "some grey liquid" twice each week, which was continued until the latter part of January, 1912. Although the patient says she repeatedly called attention to the fact that her mouth was sore, she was told that it was only what was to be expected and nothing to be alarmed at.

On February 1, 1912, she consulted her dentist, who, on account of ulceration of cheek and gums around both upper third molars, extracted them, with the result that perfect healing took place upon the right side, but the ulceration continued and spread upon

the left. Owing to this condition, she was referred to me.

Her dentist had previously referred her to Dr. S. Simon, who gave her one intravenous injection of salvarsan, 0.4 gm., on February 24, 1912, and another, at my suggestion of 0.5 gm., on March 18, 1912.

Despite active treatment with potassium iodide and local cleansing and local applications of iodine, the patient gradually grew worse. On account of the large amount of necrotic bone exposed and loosening of teeth, operation was decided upon after consultation with Drs. Freeman, Markley and Simon. She was operated March 28, 1912, under gas and oxygen anesthesia.

Operation: Upper left first and second bicuspids, first and second molars; the whole floor, external and posterior walls of maxillary sinus removed; also lower left first and second bicuspids and first molar with several pieces of alveolar process.

Did fairly well until April 1st, when slight swelling of left side of neck appeared. This extended upward to the angle of the jaw. Ichthyol 20% in glycerin was applied for several days, with varying success when, as it seemed to have benefited very little, hot bichloride 1-5000 was applied for twenty-four hours.

On April 6th, under somnoform anaesthesia, an opening was made upon the external surface at the angle of the jaw, and about one ounce of pus evacuated. This contained staphylococci, streptococci and pneumococci.

The patient complained of nausea most of the time, and passed a great deal of gas and large pieces of mucous membrane from the bowels. The urine contained casts, pus cells, and albumin but no mercury.

She gradually grew weaker, and showed great weakness and dilatation of the heart.

The opening under the jaw on the left was found to communicate with the pharynx, and large quantities of greyish slough could be seen both externally and internally. Several sequestra were removed, one of which proved to be the hamular process of the internal pterygoid plate. The entire soft palate on the left, and most of the hard sloughed away.

At 7:15 a. m., April 21st, hemorrhage from the throat took place in the region of the sinus to the exterior surface, apparently from the external carotid artery, of about eight ounces, and was immediately followed by death. Whether from external carotid or not could not be confirmed, as post mortem was not allowed. Patient would probably have succumbed within a few days on account of the condition of her heart and kidneys.

Case IV: Mrs. S., was referred by her dentist, Dr. Sapro, July 30, 1912.

She gave a history of having taken six powders of some grey substance at intervals of twenty-four hours, which was followed by soreness of teeth and ulceration of gums, and for this condition she consulted her dentist.

Examination revealed ulceration of the gums appearing deep red; the teeth were loosened and sore on percussion.

She was immediately placed on potassium iodide, while iodine in increasing strengths was applied locally, and free purgation with magnesium sulphate. This literally cleared up the condition in about two weeks without loss of bone and with very little loss of soft tissue.

These cases teach us that the dangers in the administration of mercury are as great today as in the past, if we are not alive to the reactions which take place the moment the toxic dose is administered, and also that we should constantly be on the lookout for toxic symptoms.

MODERN TREATMENT OF THE INSANE.

H. G. MAUL, M.D.,

Pathologist, Nebraska State Hospital, Ingleside, Nebr.

Psychiatry, today, is receiving more depth of study than any class of ailments. National committees, state governments and boards of health are endeavoring to educate the public and laity in mental hygiene. The movement is immense, and very creditable work is resulting. The mentally ill can now go to charitable institutions without legal formality, and receive treatment as one would with a broken leg.

Insane are looked upon as sick, consequently great efforts are made to search out the fundamentals of each patient's trouble by means of our most scientific diagnostic methods, in connection with the work of field nurses who conclude a very thorough personal and relative history.

On entrance to the receiving ward, most patients are put to bed for two weeks or longer, in congenial and pleasant surroundings, neatly furnished rooms or wards, decorated with plants, pictures and rugs, as wisdom permits. Great effort is made to have the hospital seem homelike and quiet. No unkindness is allowed to be shown. The attending alienist gives him a careful and detailed examination. He is then placed in that part of the hospital best adapted to his future developments. If the case is somewhat obscure, he is placed in a ward for observation, and a close clinical record taken, and when classified is treated appropriately.

Elimination for such patients is very essential. Hygiene is a demand. The hot and cold packs, continuous baths, sprays, showers, gymnasium work, massage and electrotherapeutics are very efficient and practical at institutions.

In seventy-five per cent of the cases the kidney efficiency by the phenol-sulphon-phthalein test is below forty per cent. Blood pressure in one thousand cases shows four hundred and eighty above normal, two hundred fifty normal, two hundred seventy below normal.

A violent patient is quieted by the above methods, and if successful, these are continued from two to ten days. Occasionally it becomes necessary to follow a pack or bath by a hypodermic sedative, and initiate rest by small amounts of anesthetic. The treatment means an effort to establish sufficient rest, nourishment, and quietude to allow the mentality to recuperate, and the physical derangements will gradually adjust themselves, as the former improves. Close watch is kept to detect the patient's natural fitness for employment, and they are led into this by skillful nurses and trained attendants, who use nothing but kind and efficient measures.

An air of quietude is maintained above everything. Patients are invited to do things, and by kind suggestions many take part.

Motion picture shows, dances, base ball games, concerts, and the like keep up the social benefits.

When patients are physically ill, the cause, if possible, is determined, and the case medicated accordingly. The necessary surgery often aids wonderfully. Rough and harsh treatment of the insane is today looked upon just as improper and injudicious as if the same means were used to obtain successful results in private practice.

HERNIAS OF THE UTERINE APPENDAGES

AIME PAUL HEINECK, M.D.,

Surgeon to the Cook County Hospital, Chicago, Ill.

(Concluded from December, 1912.)

Summary.

1. The Fallopian tube, the ovary or the tube and ovary, in part or in their entirety, may be herniated.

2. The herniated tube, ovary or tube and ovary may be the sole content of the hernial sac, or there may be present as associated hernial contents one or two or more of the following structures or organs: Meckel's diverticulum, appendix vermiformis, omentum, urinary bladder, intestine (small or large), uterus.

3. Tubal, ovarian and tubo-ovarian hernias are congenital or acquired, unilateral or bilateral; exist alone or in association with one or more other hernias of the same or of dissimilar anatomical types, of the same or of dissimilar clinical characteristics.

4. These hernias, in a small proportion of cases, coexist with malformations, underdevelopment or absence of other internal genitalia or of some external genitalia: Imperforate vagina, absence of vagina, atresia of tube, unilateral absence of tube, of ovary or of tube and ovary, absence of cervix uteri, rudimentary uterus, absence of uterus, etc.

5. In individuals having a hernia of a tube, an ovary or of a tube and ovary, pathological states of other internal genitalia or of some external genitalia may be present: Vaginitis, ovarian cystoma, uterine fibroid, uterine prolapse and other uterine displacements, etc.

6. These hernias may exist with pathological states of organs other than the internal or external genitalia: Chronic hydrocephalus, multiple stenosis of intestines, hydronephrosis, etc.; these co-

existing pathological states having no relation of cause or effect to the hernial infirmity.

7. Congenital or acquired hernias of the tube, ovary or tube and ovary, may develop at any period of life. These hernias have been observed in nulliparae, in primiparae and in multiparae. No age is exempt. No race is immune.

8. According to their anatomical site, hernias of the uterine appendages are designated as post-operative or ventral, gluteal, sciatic or ischiadic, obturator, femoral and inguinal.

9. The tube, the ovary or the tube and ovary may be present alone or in association with other organs in the sac of any variety of gluteal, obturator, femoral or inguinal hernias.

10. Clinically, these hernias are reducible, irreducible, non-inflamed, inflamed, strangulated or their pedicle may be the seat of torsion.

11. Torsion of the pedicle of a herniated ovary or of a tube and ovary, an accident peculiar to, and not infrequent in, hernias of the uterine appendages, gives the same clinical symptoms and determines the same anatomical changes in the herniated organs as are observed in the strangulation of hernial contents at one or another or more points.

12. We were able to collect eight times as many hernias of the inguinal type as of all the other hernial types put together.

13. Tubal, ovarian and tubo-ovarian inguinal hernias are recent, old or recurrent; are direct, interstitial or intraparietal, indirect or oblique. If indirect or oblique, they are either com-

plete or incomplete. A few sliding hernias are on record.

14. All the bilateral tubal, ovarian or tubo-ovarian hernias recorded in the medical literature of the last twenty years were of the inguinal variety. In bilateral hernias, both hernias may or may not show the same degree of development; they may have appeared simultaneously or one may have appeared a shorter or longer time before the other. They may show similar or dissimilar clinical characteristics. When bilateral, one hernia may be irreducible and the other reducible.

15. All the hernias in which the complication "torsion of the pedicle" occurred were irreducible congenital inguinal hernias.

16. All the femoral tubal, ovarian or tubo-ovarian hernias recorded in the medical literature of the last twenty years were of the acquired type and appeared in advanced adult life. "Femoral hernia is essentially a hernia of adult life."

17. Hernias of the uterine appendages, in the absence of anomalies of the other internal genitalia or of the external genitalia, do not prevent conception, do not interfere with gestation, nor unfavorably influence parturition. Pregnancy can occur previous to, during and subsequent to the existence of hernias of this nature.

18. The etiology of hernias of the uterine appendages is that of hernia in general. As main factors should be cited: All conditions that weaken the abdominal wall, all conditions that increase the intra-abdominal pressure and all conditions that increase the mobility of the uterine adnexae. Heredity, pregnancy and the partial or complete persistence of the canal of Nuck are the most important predisposing causes.

19. The herniated organ or organs may be free from all degenerative changes.

20. The herniated organ or organs may be bound to the sac-wall, or to

each other; may be the seat of congestion, gangrene, hemorrhage, inflammation, suppuration, tuberculosis (primary or secondary), cystic and neoplastic disease (benign or malignant).

21. The herniated organ may be the seat of gestation.

22. The hernial sac and the herniated adnexa or adnexae may be the seat of an inflammation, suppurative or other in character, which in progressing by continuity of surface has extended upward from the vagina giving us the following anatomical picture: Vaginitis, endocervicitis, endometritis, salpingitis or pyosalpinx, ovaritis and saccular peritonitis.

23. The hernial sac and the herniated contents may be the seat of an inflammation, suppurative or other in character, which has reached the tube and ovary by way of the parametrial and parasalpingeal connective tissue.

24. Pathological processes originating in the hernial contents may by extension by contiguity of tissue involve the sac and its overlying tissues.

25. The hernial sac and the herniated tube, ovary or tube and ovary can become the seat of pathological processes secondary to disease of the associated hernial contents: Epiploitis, appendicitis, gangrenous gut, etc. Infection spreading by contiguity of surfaces.

26. The herniated tube, ovary or tube and ovary and the associated hernial contents may be free of disease or the uterine adnexae may be normal and pathological changes be present in the associated hernial contents: Appendicitis, gangrenous gut, epiploitis, etc. The associated hernial contents may be normal and the herniated uterine adnexae be the seat of morbid changes.

27. It is at times difficult, at times impossible, to state with absolute precision whether the anatomical changes present in the herniated organ or organs developed previous to or subsequent to the displacement of the tube.

ovary or tube and ovary into the hernial sac.

28. Truss-treatment for hernias of the uterine appendages is not curative, is often productive of discomfort and interference with the nutrition and development of the herniated tube or ovary.

29. Women who suffer from any form of hernia should be carefully watched before, during and after their confinement so as to prevent or rather minimize any undue strain upon weak regions of the abdominal wall. These women, at the close of lactation or towards the end of the first year following their confinement, should in the absence of contraindications be subjected to an operation for radical cure of the hernia.

30. In the female, all hernias irrespective of anatomical site, of clinical condition or of nature of contents should, in the absence of a constitutional state contraindicating operations of election, be subjected to an operation for radical cure.

31. Clinical conditions so closely simulating hernias of the uterine appendages that a positive diagnosis without operation appears impossible, should be subjected to operative treatment. Only benefit can be derived from adherence to this rule. A diagnosis is established and a cure is effected.

32. In these hernias as in all other hernias, the ideal time for operation is previous to the development of degenerative or other pathological conditions in the herniated organ or organs and previous to the occurrence of any of the various complications incident to hernias.

33. The mortality of operations for the radical cure of hernias, if performed at an opportune time and by a

rapid operator competently assisted, is nil.

34. To be effective, operations for radical cure of hernias must well fulfill two essentials: The suppression of the sac and the strengthening of the area through which the hernia has escaped.

35. In all herniotomies, the sac should be incised and the hernial contents examined.

36. In the female, the inguinal rings are comparatively small. They can, without inconvenience to the patient, be closed.

37. The herniated normal tube or ovary should never be sacrificed. These organs have an important role and in the absence of marked structural impairment should be returned to the abdominal cavity.

38. The herniated abnormal tube, abnormal ovary or abnormal tube and ovary should be removed if their return to the abdominal cavity is associated with peril, immediate or remote, to the patient or if these organs are so altered anatomically as to be functionally worthless. In sacrificing tissues or organs, the surgeon must be economical.

39. Until we are better informed as to the frequency and nature of true and false hermaphroditism, removed herniated uterine adnexae not having a distinctive structure should be subjected to a microscopical examination. This will avoid mistaking testicular for ovarian tissue and vice versa.

40. In the treatment of strangulated sciatic or gluteal, obturator and femoral hernias of the uterine appendages in which the hernial sac also contains gangrenous gut, a double operation is almost always indicated: A laparotomy for the repair of the intestinal lesions and a herniotomy for the radical cure of the hernia.

AN OUTLINE OF CONVULSIONS AND SPASMS.

GENERAL CHARACTERS.

Cerebral: Irritation of central neuron. Contractions usually **clonic**; fits generally begin locally in organic brain disease (special sensory aura or part first rigid may indicate part of cortex affected); unilateral or bilateral, slow, athetoid or choreiform movements; persistent **headache**; partial hemiplegia; paralysis of cranial nerves; vomiting; sometimes optic neuritis; monospasm diagnostic of irritative cortical disease (particularly cicatrization anterior to fissure of Rolando—often followed by transitory unilateral paresis); convulsions usually absent in destructive lesions of cortex; hysterical movements markedly rhythmic—affecting muscles in groups.

Spinal: Irritation of peripheral neuron. Contractions mostly **tonic** (sometimes clonic at end), excited by any peripheral impression; fibrillary contractions of smaller muscle bundles; unrest or fluctuation of muscle; stiffness usually most marked at night; mind clear; spasms a late symptom of chronic organic disease following descending degeneration of lateral column.

Pontal: Muscular twitchings, general convulsions and usually anesthesia; may be crossed hemiplegia.

Cerebellar: Forced gyratory movements with intense vertigo in lesions of middle peduncle of cerebellum.

Special Causes.

Grand Mal: See table.

Treatment: Keep patient largely on an unsalted milk, egg, fruit and farinaceous diet.

Ten drams of potassium bromid and 3 drams each of bromids of sodium and ammonium and sodium benzoate in a quart of water. Dose at first, a tablespoonful after breakfast and at bedtime; to be increased if need be to control seizures; if attack recurs at

same hour each day, give 2-3 dose an hour before.—Tourette.

Amyl nitrite gtt. iii-iv over mouth to abort; sodium bromid gr. xv t. i. d. for a child of 8 to 12 years, increasing $\frac{1}{4}$ every 3 months for first year, stationary second and fourth, decreasing third year—Fowler's solution prevents acne: counter irritation to back of neck.—Hammond.

Solanum carolinense, fresh fluid extract, one dram upward to full constitutional effect, maintained for months.—Thrush.

Nocturnal: Chloral 12 gr. in syrup of acacia and water at bedtime.—Thornton.

Status Epilepticus: Hyoscin hydrobromate 1/200-1/50 gr. for 2 or 3 doses; large enemas of hot water; hot milk, laxatives, diuretics.—J. S. Scott.

Strumous Subjects: Syrup of bromid of iron, 5 to 10 drops in water after meals.—Thornton.

Reflex of Children: Ammonium bromid, 5 gr. or less, every 4 hours for child of 1 year; no bromids should be persisted in, owing to nervous depression and tendency to bromid rash.—Garrod.

Vasomotor Instability: Cephalic electrization, using thoroughly moistened sponge electrodes, with plus pole on neck and minus pole over part of brain.—Hughes.

Hysteria: See table. Slow or rapid, rhythmic, staccato oscillation of one part most characteristic; also highly co-ordinated movements as jumping, dancing, etc.

Treatment: Hypodermic injection of 1/10 gr. apomorphin hydrochlorate.—C. B. Richmond.

Dash of cold water; sharp command: pressure on hysterogenic zones; inhalation of ether if other means fail.—Church.

Petit Mal: See table.

Name—	Occurrence—	Onset—	Consciousness—	Contractions—
Grand Mal.	Nocturnal or diurnal; infrequent.	Sudden; apparently causeless with aura and sharp scream.	Lost for a few seconds or minutes; often sleep afterward.	Bizarre—first tonic, then clonic.
Hysteria.	Emotional females.	Often gradual with palpitation and globus hystericus.	Usually preserved.	Rigidity; purposive struggling and tossing; opisthotonus.
Petit Mal.	Diurnal; epileptics.	Sudden, with aura, vertigo or dim vision.	Lost or suddenly clouded momentarily.	Usually absent; may be starting or dropping.
Syncope.	Follows mental shock or hemorrhage.	Usually gradual, preceded by faintness and sweating.	Partially lost.	Absent; great muscular relaxation.
Uremia.	Nephritic patients; continuous or paroxysmal.	Often gradual, preceded by somnolence.	Lost in severe attacks.	Mostly clonic and general; rarely rigidity.
Alcoholism.	Chronic inebriates.	Sudden or gradual, with tremors, headache, visual disorder.	Lost.	Epileptiform; often weak.
Syphilis.	Acquired form chiefly.	Sudden; often preceded by severe headache.	Lost.	Epileptoid, incomplete or unilateral.
Brain Tumors.	Irregular intervals.	With local numbness and tingling usually.	May be exactly like epilepsy.	Jacksonian, focal, slight, partial, recurrent.
Tetanus.	Follows septic injuries.	Gradual, beginning in jaw, with nervousness.	Preserved.	Always tonic; opisthotonus common.

Facies—	Duration—	Termination—	Miscellaneous—
Pallid at first, then livid and frothy; dilated pupils. Emotional and variable.	A few minutes.	Spontaneous, in sleep or coma.	Weak-mindedness in intervals; biting of tongue, involuntary micturition, insensitive pupil.
Blank for a moment.	Often a half hour or longer.	Sometimes by shock or emetic.	Screaming and talking during course; may bite tongue and hands; resists opening of eyes.
Pallid; dilated pupils.	A few seconds.	Spontaneous and very sudden.	May be only transient mental confusion; rarely involuntary micturition.
Sometimes twitching of muscles.	Variable.	Gradual; no somnolence.	Extremities cold; temperature slightly subnormal.
Capillary congestion; injected conjunctiva.	A minute to hours.	Spontaneous.	Albuminuria and casts; subnormal or febrile temperature; biting tongue; muttering.
Frequently, pallid.	Variable.	Often with hallucinations.	Paresis and dementia during intervals.
May be initial conjugate deviation.	A few minutes.	Spontaneous in sleep or coma.	Osteocopic pains; history of syphilis and cutaneous lesions.
Risus sardonicus.	A few minutes.	Usually with temporary paralysis.	Choked disc; ocular muscle palsy; localized headache.
	For hours.	Usually death from asphyxia.	May be high fever or involuntary micturition; marked hyperesthesia.

Treatment: R. Ammonii brom. dr. ss.; antipyrini gr. v; liq. potass, ars. m. v; aq. menth. pip. q. s.: A tablespoonful in water night and morning.—H. C. Wood.

Belladonna leaves and extract, 1/5 gr. of each in pill every day at same hour, for anemic subjects, increasing 1 pill each month.—Trousseau.

Syncope: See table.

Treatment: Place flat on back and loosen clothes; secure plenty of fresh air; smelling salts or administration of

little alcohol or sal volatile in water, or subcutaneous injection of 5 to 15 m. ether in water; artificial respiration and galvanization of phrenic nerve.—Flint's Encyclopedia.

Uremia: See table. Attack often brought on from acute renal congestion in free livers by exposure to cold.

Treatment: Protracted irrigation of colon with hot saline solution. Chloroform inhalation if convulsions severe; remove 12-20 oz. blood if patient robust and full-blooded; free dia-

phoresis; if convulsions tend to recur, give chloral by mouth or rectum, or better morphin.—Osler.

Eclampsia of Lying-In Women: Try to prevent by non-nitrogenous diet (especially milk), by giving iron peptonate in full doses, flannel clothing, abundance of drinking water, frequent hot baths, laxatives (elaterium $\frac{1}{8}$ gr.), and in case of high tension 1/100 gr. glonoin every three hours till tension abates and then p. r. n.; when symptoms grow worse and uremia threatens, use hot pack and empty uterus promptly, controlling seizures by inhalations of chloroform and by chloral (40 gr. per rectum) and sodium bromid—also venesection (10-16 oz.) or glonoin (1/50 gr. repeated hourly if need be for full, bounding pulse).—Grandin and Jarman.

Norwood's tinct. veratrum viride m. x-xx hypodermically to arrest convulsions.—Reamy.

Threatened Eclampsia: Thyroid extract pushed to full effects on circulation.—Nicholson.

Alcoholism: See table.

Treatment: Chloroform carefully administered.—Osler.

Syphilis: See table.

Treatment: Saturated solution potassium iodid, 10 drops or more with a tablespoonful of essence of pepsin in water after meals.—Thornton.

Brain Tumors: See table.

Treatment: Tonics and cod liver oil in tubercular cases; a thorough course of mercury and potassium iodid in syphilitic cases; surgical operation when diagnosis and localization can be made of cortical or even subcortical growth; morphin, Indian hemp, chloral and ice to head for relief of pain.—C. E. Beevor.

Tetanus: See table.

Treatment: Perfect rest in a dark room; catheterization of bladder and daily evacuation of bowels; keep patient under influence of chloral; give chloroform, morphin and amyl nitrite

occasionally; amputation of limb or excision of tissue for some distance around wound (cautery may be used); tetanus antitoxin, 15 to 30 cc. (smaller doses when used by intravenous or intracranial route) every 6 hours till improvement, then lessen dose and increase intervals.—Nancrede.

Disinfect wound with strong antiseptic solution, place patient in quiet room, regulate diet and give hypodermic of 2 per cent solution carbolic acid every 2 or 3 hours—3 minims (of acid) in 24 hours at first, rapidly increased to 6 or 9 minims.—H. C. Wood, Jr.

Infantile Convulsions: Usually reflex; may be very frequent; general tonic and clonic—one side usually more than other; often accompanied by convulsive shrieks; eclampsia in children frequently takes place of rigors in adults.

General Treatment: R. Chloral hydratis, sodii bromidi, sodii bicarb. aa. gr. i; aquae dr. i. Every hour for a child under 4 months.—Potter.

Purgative dose of calomel, followed in a few hours by chloral 4 gr. and potassium bromid 8 gr. in syrup and water at one dose for a child of 2 years.—Jacobi.

Congestive: Hot mustard and water foot bath, with vinegar and water or spirit and water to head.—Ellis.

Anemic: General mustard and water bath; friction; sal volatile to nose, a few drops of brandy.—Ellis.

Reflex: Chloral hydrate $\frac{5}{12}$ to 3 gr. every 2 hours for one year old.—Garrod.

Inward Fits: Carminatives; gentle rubbing of stomach.—Ellis.

Immediate Treatment of Infantile Convulsions: Place at once in hot pack made by dipping towel or sheet in a quart of tepid water containing a teaspoonful of mustard, wrapping this around child and covering with a dry blanket, keeping it on for 10 or 20 minutes, meanwhile applying chloroform or ether to nose and administer-

ing a large injection of hot water; cold to head unless shock; stimulants if temperature subnormal; if convulsion unduly prolonged, give a hypodermic of morphin— $\frac{1}{48}$ gr. for 6 months, $\frac{1}{24}$ gr. for 1 year, $\frac{1}{16}$ gr. for 2 years—to be repeated in double amount at end of hour if no effect from first injection; chloral per rectum in warm water or milk also useful—4 gr. at 6 months, 6 gr. for a yearling, to be repeated within an hour; calomel usually in order; meanwhile ascertain underlying cause and keep absolutely quiet for a few days.—J. Madison Taylor.

Special Causes.

Organic brain diseases producing or forerunning epilepsy: Congenital syphilis or sclerosis of cerebral cortex.

Acquired infantile cerebral paralysis: Usually with slight fever; spasm may be more marked on affected side.

Meningeal hemorrhage: Onset immediately after birth or injury.

Brain tumor: Jacksonian type, bulging anterior fontanel, severe headache, neuroretinitis.

Acute anterior poliomyelitis: Convulsions at onset with fever and rapid paralysis.

Preceding functional nervous disease: Hysteria.

Emotional disturbances or severe fright.

Diseases of bones, particularly rickets: Strong predisposing condition.

Onset of acute infections: Particularly pneumonia, scarlet fever, measles, smallpox and pernicious malaria.

Hyperpyrexia: Insolation, for example; slight fever may excite eclampsia in neurotic children.

Inflammatory irritation of brain membranes: Meningitis (retraction of head and squint); trauma, cerebral abscess, hydrocephalus; hydrocephaloid disease (like meningitis, but following severe diarrhea or wasting maladies; retracted fontanel).

Uremic poisoning of nephritis: Pallor, dropsy, albuminuria, casts.

Vascular stasis of pertussis or cardiac disease.

Pleuritis, bronchitis, enteritis.

Peripheral irritation: Overloading stomach, indigestible food, constipation, diarrhea; intestinal parasites, particularly ascarides; disordered dentition; phimosis; stone-colic; foreign bodies in ear or nose; hot baths; irrigation of pleural cavity; scar tissue; cold or fatigue; deviation of septum or hypertrophied turbinates; ocular insufficiency.

Acute poisoning: Particularly by belladonna.

Disordered breast-milk: From alcoholism, fright or anger in mother or wet-nurse.

Epileptiform Convulsions in Adults: See also grand and petit mal above. Jacksonian epilepsy begins in a definite area and may spread to other parts in the order of the cortical motor centers; usually one-sided, without loss of consciousness; convulsed part weakened.

Many Acute Poisons: Sudden and unexpected.

Chronic Plumbism: Preceded by headache, weight in head or visual disorders; lead colic; blue line on gums.

Treatment: Potassium iodid, 10 gr. t. i. d. after meals in a half glass of water; morphin if required.

Chronic Alcoholism: Tremors, dementia, bloated face and history.

Treatment: Bromid of potassium, sodium, calcium or ammonium, 15 to 30 gr. in solution t. i. d., or zinc bromid 2 gr. in water or simple syrup 3 or 4 times a day, gradually increased to 2 or 3 times the quantity.—Hammond.

Malaria: Neuralgia and chills.

Treatment: Quinin and arsenic.

Apoplexy: Post-hemiplegic.

Cerebral Sclerosis, Embolism, Thrombosis, Softening and Abscess: Constant headache and other brain symptoms.

Trauma: Jacksonian type as a rule; follows concussion immediately.

Treatment: Trephine when practic-

able and remove center of control over part where fit starts.—Osler.

Paretic Dementia: Apoplectiform and epileptiform attacks with progressive dementia and general paresis.

Treatment: Bromids freely.

Puerperal Eclampsia: See uremia above and in table.

Cerebral Anemia: Exhausting hemorrhage or discharge; small, weak pulse.

Vascular Stasis of Cardiac Disease: Cardiac murmurs and dropsy.

Treatment: *Strophanthus*, *digitalis*, *strychnin*.

Entrance of Air Into Veins: With intense dyspnea.

Unbalanced Ocular Muscles: Usually strabismus or diplopia.

Profound Exhaustion.

Gall-Stone or Renal Colic.

Cold, Fatigue, Burns, Fright, Anger.

Menstrual Epilepsy: Usually with dysmenorrhea.

Treatment: Antipyrin gr. v and sodium bicarbonate gr. ii 3 or 4 times daily, commencing a few days before expected period.—Dott.

Convulsive Tremor: Paroxysms of clonic convulsions affecting voluntary muscles, without loss of consciousness or mental aberration; sometimes vertigo and pain in head.

Treatment: Ten drops t. i. d. of dram to ounce solution of zinc bromid for 2 weeks, then 15 drops t. i. d. for 2 weeks, and so on, increasing 5 drops every fortnight for 3 to 6 months, then gradually reduce dose.—Flint's Encyclopedia.

Simulation of Epilepsy: Normal pupils or nearly so; malingerer can be suddenly startled or made to cry out with pain; suggestion may excite hysterical attack.

Tetanic Convulsions in Adults: See also tetanus above.

Ignatia and Strychnin Poisoning: Lock-jaw last (first in tetanus); spasm of limbs and then opisthotonus; intervals of relaxation.

Hysteria: Tetany may often be produced by pressure for several minutes over bicipital or crural sulcus.

Catalepsy: Sudden onset from emotion; body held in fixed posture; face usually expressionless; attack may be arrested with an emetic; nearly always hysterical.

General Tetany: Tonic flexion of extremities; from cold, profound debility, gastrectasis, thyroid wasting, onset of acute fevers, specific epidemic infection, and poisoning by ergot, alcohol, carbon dioxide or chloroform; often with rickets in children.

Treatment: Potassium bromid, massage, electricity, spinal ice-bag, thyroid extract; chloroform inhalations in severe cases.—Osler.

Diseases of Pons or Cerebellum: Vertigo, titubation and focal symptoms.

Congenital Paramyotonia: Facial or general contractions; excited by cold and allayed by warmth; may last for hours.

Spastic Paraplegia: Clasp-knife rigidity; extensors chiefly, and most marked in extension.

Treatment: Rubbing, warm baths. potassium bromid, calabar bean and belladonna.—Stevens.

Spinal Epilepsy: Tonic spasm of legs, passing into clonic spasm; invariably organic.

Spinal Muscular Atrophy: Simple rigidity of affected parts.

Cerebral Hyperemia: Sometimes causes rigid muscles in children and youths.

Treatment: Hot foot-bath; saline purge.

Neurasthenia: Cramps in calves on falling asleep.

Treatment: Massage and hydrotherapy (alternate hot and cold affusions); rest, forced feeding and general tonic treatment.

Psoas Spasm: Thigh flexed on trunk; rigidity tested by hyperextension with patient on face; from tuber-

eulosis of hip or spine, hypertrophic arthritis of spine, or appendiceal or perinephric abscess.

Cramp of Gastrocnemius: Most common in pregnant women.

Treatment: Rub part or jump from bed and stand on affected leg; if these means fail, use hypodermics of morphin.—Napheys.

Hydrophobia: First in pharynx, then general; frenzy or delirium may supervene.

Facial Spasms: Unilateral or bilateral; intermittent in irregular action of gray matter; continuous from pressure on motor fibers; complete of one side in lesion of nerve or nucleus; contractions often painful; most frequent in middle life.

General Treatment: In recent cases due to cold use diaphoresis and bathe side of head frequently with hot water; extract decayed teeth; attend to general health; give tonics when excited by depressing emotions.—Gowers.

Neuroses: Mimic or habit clonic spasms; sometimes from climacteric changes; in hysteria one angle of mouth may be retracted and mouth turned to same side.

Treatment: Freeze cheek daily with rhigolene spray.—Mitchell.

Exposure to Cold: Often relieved by dry heat.

Chorea: Twitching of corner of mouth, eyelids and eyebrows.

Treatment: Fowler's solution, 3 to 5 drops t. i. d. after meals, gradually increased to 6 or 8 drops; if insomnia, give 15 gr. chloral and 20 gr. bromid; if anemia, give pyrophosphate of iron, gr. 20-25 in 24 hours.—A. Jacobi.

Aneurysm of Vertebral Artery.

Convulsive Tic Douloureux: Unilateral, sudden darting, very painful.

Treatment: Remove any source of irritation; mild galvanic current with anode over sensitive points.—Anders.

High Fevers, Jaundice, Uremia, Delirium Tremens, Meningitis, Epilepsy. Anemia, Debility, Grief, Worry.

Reflex Irritation from Decayed Tooth or Eye Trouble.

Facial Paralysis: Secondary, with persistent contractures and weakness; may be hemiatrophy.

Treatment: Remove all sources of irritation (blister or thermocautery may remove painful spot over fifth nerve); strychnin may be tried hypodermically; freeze cheek with spray for a few minutes daily or every other day; operate in severe cases.—Osler.

Irritative Lesions of Facial or Trigeminal Nerve, Nucleus, Pons or Cortical Facial Center: Tumor or aneurysm; in nerve lesions striking motor point of facial nerve causes tonic tetany.

Neurotic and Perverse Children: Facial spasm with echolalia and coprolalia.

Masticatory Spasms: Nearly always bilateral; relaxing under ether.

General Treatment: Blister behind ramus of each jaw for hysteria; extract carious molar; hot air or vapor bath if due to cold; bromids for paroxysmal clonic form; cautery beside cervical spine for trismus due to cold.—Gowers.

Tonic: Trismus.

Tetanus: Trismus first sign; general painful tonic spasm; septic earthy wound.

Full Doses of Strychnin: Trismus late, if present.

Hysteria: Excited and removed by emotions and suggestion.

Peripheral Injury, Tonsillitis, Periostritis or Decayed Teeth: Facial neuralgia; spasm does not spread; ceases on removing cause.

Late Stage of Paretic Dementia, Meningitis and Focal Organic Diseases: Headache, vomiting, fever.

Trismus Neonatorum: Lockjaw of newborn from sepsis or trauma.

Treatment: R. Atrop. sulph. gr. 1/2500; chloral gr. ii; mucilag. amyli dr. ii: Rectal injection, to be repeated every hour until spasm is relieved.—Thornton.

Clonic: Chill; general convulsions (often at beginning); paralysis agitans; idiopathic in elderly women.

Ocular Spasms.

Spasms of Accommodation: (Farthest point of distinct vision coincides with normal near point) from hysteria or overuse of ametropic eyes.

Tonic spasms of extraocular muscles (convergent squint and stationary diplopia) in irritating lesions of nerves (particularly tubercular meningitis) and sometimes in hysteria.

Blepharospasm (usually clonic and bilateral; concentric wrinkles; resistance) in hysteria, photophobic conditions (local inflammation, especially phlyctenular, or ametropic or accommodative eyestrain), meningitis (severe headache and stiff muscles of neck), fissure at angle of lids, foreign body, reflex neuroses from sexual organs or alimentary tract, and sometimes in epileptic attacks (unconscious stage).

Treatment: Remove nerve irritation by cocaine for conjunctival disease, and give bromid and belladonna, iron and quinin; cold douches to eye.—Gowers.

Twitching of eyelids a sign of eyestrain, chorea, hysteria, disseminated sclerosis, neurasthenia (most marked on closing eyes at command) or nervous irritation (may precede convulsions).

Constant quivering of eyelids in chronic alcoholism and paralysis agitans.

Nictitation from errors of refraction, chorea, hysteria and reflex irritation from throat and nose (adenoids, hypertrophies), teeth or digestive organs.

Spasm of levator palpebrae (Abadie's sign) from irritation of fifth nerve and in exophthalmic goiter (lid lags behind in looking downward, from spasm of Mueller's muscle — von Graefe's sign; diminished frequency of winking—Stelwag's or Dalrymple's sign).

Rolling of eyes in uneasy sleep, mania, idiocy and epileptic fits.

Nystagmus: Nearly always bilateral and horizontal; often excited by looking to one side; from Friedreich's ataxia, disseminated sclerosis, congenital ocular defects (amblyopia, cataract, albinism), advanced locomotor ataxia, hydrocephalus, acute meningitis, pontal or cerebellar and rarely cerebral tumor or hemorrhage, epilepsy, ophthalmia neonatorum, paralysis agitans, high degrees of ametropia, diseases of middle ear, poisoning by arsenic, lead or benzine, and in miners and less often artists, composers and ironfounders.

Cephalic Spasms.

Nodding in marasmus, rickets, hysteria, habit spasm, petit mal (unconsciousness), paralysis agitans and mental disease.

Light, jerky movements in early cerebrospinal sclerosis.

Tremors of head in senility and paralysis agitans.

Tonic retraction (retrocollis) in meningitis, typhoid and other infectious diseases, lateral sinus thrombosis, cervical caries, enlarged and tender cervical glands, cervical tumors, after falls and hysterical convulsion, and rarely from indigestion and cerebral hyperemia in neurotic babies; also idiopathic disease of middle life.

Treatment of Epidemic Cerebrospinal Meningitis: Unguentum Crede (soluble metallic silver), about an ounce daily by inunction; keep nasal mucous membrane cleaned with antiseptic solution; hot applications to spine to relieve pain; trional 3 to 10 gr. to induce sleep.—Gustav Schirmer.

Draw off excess of spinal fluid, and inject Flexner's serum.

Cephalic tetanus distinguished by history of infection, sudden onset, trismus, dysphagia, respiratory disturbances and facial paralysis; symptoms often exaggerated by movement or attempting to take food.

Treatment: Local treatment most effective; punctured wounds should be thoroughly laid open and disinfected.

and free discharge from wound favored—no sealing up small opening with dry dressing.—Rose.

Lingual Spasm: Hysterical or epileptic patients chiefly.

Chorea: Usually bilateral in minor form; unilateral in post-hemiplegic.

Hysteria: Bilateral or unilateral; tongue seldom bitten.

General Paralysis of Insane: With twitching of lips.

Insular Sclerosis: Jerky movements.

Hypoglossal Irritation: Preceded by aura.

Aphthongia: On attempting to speak.

Epilepsy: Often bitten tongue.

Forced Overuse: Speakers.

Stammering and Stuttering.

Decayed Teeth.

Cortical Irritation: Usually with spasm of lip and face.

Laryngeal Spasm: Constant dyspnea and cyanosis, worse at night and increased by excitement; brassy, ringing cough.

Spasmodic Croup: Sudden parox-

(To Be Continued.)

ysms, soon ceasing and often recurring for several nights.

Treatment: Sponge moistened with hot water applied to throat, or place child in hot bath; if these means fail, an emetic almost always gives relief—1 dr. wine of ipecac or 3 to 5 gr. turpeth mineral; subsequent treatment for laryngeal catarrh.

Hysteria: Excited by emotions, cured by suggestion; may appear on attempting to speak.

Treatment: Spasm can usually be interrupted by having patient or nurse pull forcibly on protruded tongue.—Church.

Neurotic Spasms of Glottis: Occurs mostly at night in neurotic patients; not caused by emotion or suggestion.

Migraine: Spasm may replace paroxysms of headache.

Treatment: Bromids and coal-tar analgesics.

Pressure on Recurrent Laryngeal Nerve: Aneurysm, intrathoracic growths, or great enlargement of retro-bronchial glands.

MEDICAL PROGRESS

Essential Oils in Infections.—Herbert French (The Prescriber, October) advocates more general use of essential oils in cases of chronic deep-seated sepsis, such as internal venous thrombosis with pyrexia and other constitutional symptoms. To prevent nauseating the patient by continuous administration of any oil, he varies the kind of oil from day to day, giving 10 minim doses, four times daily in gelatin capsules, of oil of cinnamon one day, oil of cloves the second, oil of peppermint the third, returning to cinnamon on the fourth day, and so on. The capsules must be taken after food (to avoid gastric disturbance), and only the purest oils should be employed.

Diagnosis of Chronic Duodenal Ulcer.—Moynihan (Lancet, Monthly Cyclopedic) emphasizes four diagnostic points: (1) The anamnesis, particularly the history of "hunger pain." (2) Gastric hyperacidity, present in 40% of cases. (3) Increased pyloric peristalsis, best observed by means of the X-rays after a bismuth meal. The pain usually occurs when most of the food has reached the duodenum. (4) Blood is usually found in the stools if the latter be

examined daily for some time. By way of treatment Moynihan advocates gastroenterostomy. The mortality of the operation is only 1.3%, but perforation may take place several months after surgical intervention. In his last 14 cases operated for duodenal ulcer, a diseased appendix was removed in 12 instances.

Passive Hyperemia in Neurologic Conditions.—Dr. Alfred Gordon of Philadelphia is said by Max J. Walter (October Dietetic and Hygienic Gazette) to have employed the Esmarch bandage in two cases with writer's cramp, two with telegrapher's, one with pianist's cramp, two with acroparesis of the hands, one with erythromelalgia, two with tic of the neck, and two with brachial neuralgia. "Some of these cases have been cured with but a few applications, some of them were greatly relieved, and only a few failed to respond."

Nasal Headaches.—Severe neuralgic pain over the bridge of the nose (American Journal of Surgery) indicates pressure on the anterior ethmoidal nerve, probably due to a high deviation of the nasal septum.

Many a distressing frontal headache can be relieved by reducing the hypertrophy of a middle turbinate, preferably by streaking with trichloroacetic acid.

Rational Treatment of Phosphaturia.—Since most patients suffering from phosphaturia have gastric hyperacidity, Umber (quoted in New York Medical Journal) administers atropin ($\frac{1}{2}$ to 1 mgm. after each meal), continuing the treatment three or four weeks. Under this method the urinary acidity rose considerably, even in normal individuals. The author also recommends to reduce the intake of calcium as much as possible.

For Perspiration of the Feet.—The Medical Review of Reviews directs to wash the feet with a 5% aqueous solution of potassium permanganate every night, or else paint them with a 5% alcoholic solution of salicylic acid. "Formaldehyde is effective, but burns too much and hardens the skin, making it liable to crack."

Citrate of Sodium in Gastric Pain.—Wright, of opsonin and vaccine fame, was first to use sodium citrate for the relief of postprandial gastric pain, and recently (Medical Record) it has been introduced into France and prescribed with great success in gastric intolerance of children. Lachiny says that this remedy not only relieves gastric pain coming on three or four hours after meals, but it also has a remarkable curative effect on the morning vomiting of drunkards.

The Pain of Gastric and Duodenal Ulcer.—Judson Daland (J. A. M. A.) says that in pyloric and duodenal ulcer the pain usually occurs 3 to 5 hours after a meal, corresponding in time to the physiologic activity of the pylorus and duodenum. "If the gastric contents, secured when pain begins, 3 hours after a meal, shows no hypersecretion, hyperacidity or hyperchlorhydria, the ulcer is probably duodenal. The pain is usually in or near the epigastrium and varies in location, duration and intensity from the same causes that produce pain in gastric ulcer. As a rule, there is localized tenderness on deep pressure over the epigastrium. * * * Kinking of the duodenum, due to adhesions, may produce colicky pains in the epigastrium, which often recur regularly from 3 to 5 hours after meals."

The Reliance to Be Placed in the Newer Renal Tests.—The editor of the American Journal of Dermatology sounds a note of warning against the disposition of many of the profession to adopt one of the dye tests for the purpose of estimating the renal function, to the total exclusion of older and perhaps more reliable methods, such as the estimation of urea in ureterally catheterized specimens. Concerning phenolsulphonephthalein, Fromme and Rubner tested this drug in some 70 cases in the Frauenklinik of the Charité. They found that it was sometimes excreted slowly in cases with

absolutely sound kidneys. They declare that maintaining the catheter in situ for three hours may cause sufficient hemorrhage to practically nullify the utility of the test, and they conclude that estimation of the urea output furnishes the most reliable information pertaining to the kidneys' excretory function.

An Experimental Study of Some of the Sodium Salts in Shock.—M. G. Seelig of St. Louis (Interstate Medical Journal) recently tried out the blood pressure raising effects of direct intravascular injections of various sodium salts, as well as of carbon dioxide. The carbonates (particularly the bicarbonate) caused a marked rise of tension, which was fairly prolonged and accompanied by an increased amplitude of heart-beat and depth of respiration.

Atropin for Hemorrhage.—The editor of the American Journal of Clinical Medicine relates two cases of traumatic internal hemorrhage in which atropin proved of very great value and then adds: "This alkaloid actively stimulates the vasomotor dilators of the capillaries, increasing their caliber and capacity for blood and their attraction for it. Consequently the blood is largely impounded in the vast capillary system, the pressure in the veins and arteries is correspondingly decreased, and thus there is less blood to flow from the orifices in the lacerated vessels. This renders atropine the most powerful and certain of hemostatics. Since its effects, when given hypodermatically, are manifested within five minutes, atropine is also the quickest in getting to work."

Treatment of Pruritus Vulvae.—One of the first things to do in all cases, says Wm. L. Rhodes (New York Medical Journal, Nov. 30), is to shave thoroughly the pubic region and cleanse with green soap, repeating the procedure every few days. If the itching is due to gonorrhea, appropriate treatment for this infection will usually cure the pruritus. When depending on a non-gonorrheal cervical discharge, tampons of glycerin or boroglycerin are useful. Diabetic pruritus is sometimes greatly alleviated by 5-grain doses of sodium salicylate every four hours. "One grain of the bichlorid of mercury in an ounce of almond oil, applied locally every three or four hours, is a splendid palliative as well as a healing mixture. Iodoform in ether, applied with an atomizer every few hours, will relieve some patients when all other methods fail." Phenol mixtures and silver preparations are highly esteemed antipruritics. Keep the bowels open with calomel, and give a tonic of quinin, iron and arsenic—the last-named drug being of great value in all cases of pruritus. Bromids are indicated for marked nervousness. The patient should take mild exercise daily and get plenty of sunlight and fresh air, drink an abundance of water and abstain from all nitrogenous foods. Electricity is worthy of a trial when other methods have failed.

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SOME USES OF SODIUM CITRATE.

This white, nearly tasteless and freely soluble salt is coming into deserved prominence as a useful and innocuous remedy. It agrees well with the most delicate stomach (often relieves gastric distress) and has been given (Lichtwitz) up to 50 grams daily with no bad effects.

Nearly three years ago, Langmead (Archives of Pediatrics) reported 80 consecutive cases of wasting infants fed successfully with citrated whole cow's milk (containing two grains of sodium citrate per ounce), the age of the subjects ranging from three weeks up. He advises gradually leaving off citration during the fifth month. Others recommend as much as five grains of the salt to each ounce of whole milk. Sodium

citrate prevents the formation of large, tough curds by uniting with the caseinogen to form fluid paracasein sodium and the readily absorbable calcium citrate.

Another important use of sodium citrate is that of an alkalizer for acid, irritating urine, and particularly when there is accompanying colon bacillus infection. For this purpose one should give a heaping teaspoonful of the salt, dissolved in a glass of water, two to four times a day, gaging the alkalizing effect with litmus paper. Sodium citrate is oxidized in the blood into sodium carbonate, as shown by the marked effervescence with acids of the urine of patients who have been given the former salt.

For acidotic conditions generally, as

in severe diabetes (acetonuria, diaceturia), the cyclic vomiting of children and some cases of intractable vomiting of pregnancy, sodium citrate is sometimes very efficacious. It does not nauseate or cause diarrhea, as the bicarbonates of sodium and potassium tend to do. Of course, if alkalization by the rectal or intravenous route is indicated, the strongly alkaline bicarbonates are to be preferred.

A two per cent solution of sodium citrate in physiologic saline solution prevents the coagulation of blood, and is used for this purpose in the cobra venom test for syphilis. The same solution or one of citric acid (Wright) makes a good local application in the treatment of brawny swelling and similar surgical conditions, where it is desired to aid osmosis. Recently, in the *Denver Medical Times*, we published an abstract of an interesting article, in which the writer advocated and appeared to show the distinct value of the administration of sodium citrate in pneumonia and bronchopneumonia.

LATENT INFECTIONS.

Among the fascinating problems of internal medicine, none is more interesting than that of latent infections. The writer's limited experience in blood culture work would indicate that colon bacillema is the most common among chronic occult infections. His belief in this matter is greatly strengthened by the observations of J. George Adami of Montreal, in an address delivered before the meeting of the Medical Alumni, State University of Iowa (*Journal of the Iowa State Medical Society*, Dec. 15, 1912).

Adami says that experimentally it is easy to prove that throughout the intestinal tract leucocytes are constantly passing out through the surface layers and into the tissues, bearing metallic salts, fatty globules and bacteria. Where the intestinal wall is congested

or inflamed, this entrance of bacteria through the agency of the leucocytes is greatly facilitated. "Bacteria in short are constantly passing into the system from the intestine and upper respiratory tract, and as constantly being destroyed, notably in the mesenteric and other lymph nodes and in the tissues." The endothelial cells of the capillaries and the hosts of uncontaminated leucocytes are also important bactericidal agents.

Subinfection is the term applied by Adami to the deleterious effects produced by the toxins of the destroyed bacteria. "It may well be," he says, "that the overwork of the phagocytic cells, endothelial as well as leucocytic, in the different organs may lead to their eventual exhaustion, while further the long continued action of the liberated toxins may tell upon the nobler cells of the tissues and bring about their degeneration and atrophy."

In 1899, before the Society of Internal Medicine of Chicago, Adami brought forward observations which indicated that both pernicious anemia and ordinary portal cirrhosis of the liver are of the nature of subinfections, and he attributed both these conditions to the increased carriage inward and destruction of bacteria, particularly members of the *B. coli* group. During the subsequent period evidence has accumulated in favor of this conception of subinfection, which is being more generally accepted every year.

Adami has been able repeatedly to obtain cultures of organisms of the *B. coli* type from cases of cirrhosis in man. Opie has found that by treating laboratory animals with chloroform alone, no hepatic cirrhosis was induced, but if he subjected these animals to chloroform and then made an intraperitoneal or intravenous inoculation of a culture of *B. coli*, he could with certainty produce pronounced cirrhosis resembling that in man. "The simplest view, therefore, of the etiology of gin-drinker's

liver in man, is that alcohol or some other irritant taken into the alimentary canal, absorbed therefrom has a deleterious action upon the hepatic parenchyma and at the same time causes inflammatory conditions of the intestinal mucosa; that by the entrance of the *B. coli* and other organisms into the portal vessels, these organisms are carried to the liver and there destroyed, their toxins setting up that low form of irritation which leads to the simultaneous degeneration and destruction of the hepatic cells and overgrowths of the connective tissue of the organ."

The hemolytic action of colon bacilli and allied organisms is shown in portal cirrhosis by increased hemosiderin pigmentation of the liver, due, just as in pernicious anemia, to increased destruction of the red corpuscles and the liberation of hemoglobin. Of similar hemolytic origin are those remarkable cases noted within the past few years and termed microbic cyanosis. Stokvis of Amsterdam, Gibson and Douglas of Edinburgh, and Blackader and Duval of Montreal, have described fatal cases in which there was a rapid development of purplish cyanosis. Nothing was found to account for the condition, save the presence of abundant *B. coli* in the blood during and immediately after death.

As regards pernicious anemia, Adami holds that the commonest form seen in the Temperate Zone is associated with gastritis and achlorhydria, permitting multiplication of *B. coli* and perhaps other hemolytic bacteria, in the upper portion of the gastrointestinal tract. Hunter of London also ascribes pernicious anemia to the constant low infection of the gastrointestinal tract by the streptococci (markedly hemolytic) present in the suppurative discharge from the gums in pyorrhea alveolaris. Christian Herter of New York found that in young people presenting a superabundance of *B. Welchii* and other

hemolytic anerobes in their feces, there was present a marked anemia.

Recurrent infections are ascribed by Adami chiefly to the staphylococci and streptococci which grow normally upon the cutaneous and mucous surfaces and which, unlike most bacteria, when they invade the tissues induce at most a transient immunity lasting for but a few days or weeks. Boils, erysipelas and acute rheumatism are preeminent in this group. Everything today points to the fact that the majority of cases of acute rheumatism are set up by streptococcus organisms. Chronic rheumatoid arthritis, as shown by blood cultures, is either a recurrent micrococcal infection, or else it is a continuous low infection with intermittent exacerbations.

Concerning tuberculosis, according to Adami the tuberculocutaneous reaction demonstrates that "as we pass from early childhood to youth and early adult life a greater and greater proportion of all individuals harbor the tubercle bacillus, until by the 19th year scarce five per cent of the population is free from this disease." He believes that the tuberculous infection of children is of human and not of bovine origin, basing his belief in part on the prevalence of tuberculosis in Indian and Japanese children, who are not fed on cow's milk. As to prognosis, "It certainly looks very much as though in the vast majority of cases we deal with a disease which lies latent for a longer or shorter period of years; nay, if this does not seem too paradoxical, a disease which in the vast majority of people lies latent for all the remaining period of life."

THE LATEST WORD ON DIABETES.

Carl von Noorden delivered a notable series of lectures last fall at the New York Post-Graduate Medical School and before the St. Louis Medical Society, in which he gave the mature

conclusions of twenty years of experience and and observation, covering over 4000 cases of diabetes personally treated by himself.

He shows that while carbohydrates contribute most to the formation of dextrose, proteins occupy an important second place (exerting an irritant action upon the sugar-forming organs), while fats alone are nearly innocuous.

In considering the rise in caloric production in diabetes and its causes, he concludes that this febrile tendency is connected with the interrelations of the ductless glands; hyperthyroidism antagonizing the pancreatic secretions and favoring both fever and hyperglycemia. He explains in a most simple manner how the "sugar factory" of the liver, which normally dehydrates carbohydrates to glycogen (which is then stored in the cells till needed as circulating dextrose), is under the antagonistic and normally well balanced influence of two sets of organs, those which lessen and those which increase its excitability. The chromaffin (adrenal) system has a directly irritant or sensitizing action upon hepatic sugar production, and is itself stimulated by a highly strung sympathetic system (neurasthenia, psychic shock, mental or bodily overstrain, loss of sleep, etc.), and more or less inhibited by a hyperactive vagus system (hysterical subjects). The pancreas, on the other hand, through its internal secretion, has a calming effect upon the hepatic sugar factory. The internal secretion of the pancreas is inhibited (thus promoting glycosuria) by the thyroid gland and the hypophysis, and is perhaps stimulated by the parathyroids. The call of the tissues (particularly the muscles) for sugar needed in their metabolism, is naturally a stimulus to the sugar-forming mechanism and is somewhat under the control of the will (avoiding heavy muscular work, loss of heat, abundant food or high protein diet). The sugar forming material streaming

up from the intestine to the liver corresponds to the alimentary factor in glycosuria, and is, according to von Noorden, the chief consideration in diabetic cures.

Von Noorden is thoroughly convinced of the therapeutic importance of restriction and deprivation of carbohydrates for diabetic patients. He shows from clinical records how the dangers of acidosis have been greatly overrated, except in the most severe cases, and how acetoneuria and diacetoneuria tend to disappear after occasional egg and vegetable days, oatmeal and butter days, hunger and bed days, tea and weak bouillon or whiskey (3 to 5 ounces) and soda days. After a few weeks of bread-free diet (calming therapy), the patient can often be given from 25 to 80 grams of bread on alternate days. Beefsteak is particularly objectionable.

The lecturer considered drugs (salicylic acid, pantopon, veronal, bromids) of secondary value. He attributed the temporary drink "cures," at Carlsbad, Vichy and Neuenahr to the rest, careful living and dietary restrictions enforced at these resorts.

In really severe forms of diabetes alkaline therapy is demanded—from 15 to 60 grams daily of sodium bicarbonate or citrate (not at meals). When the larger amount is called for, a drop enema composed of three per cent solution of sodium bicarbonate is least irritating and most effectual. In comatose cases intravenous injections of 3½ to 4 per cent sodium carbonate solution are required. "The result is sometimes astounding. Patients who have been completely unconscious, often after the first 300 to 400 c.c. of the sodium solution recover from the coma, and after the surmounting of the momentary danger remain well for a relatively long period. Of course, these are the rarer cases; as a rule, the fatal issue is postponed for a short time only."

A SUMMARY OF THE ANNUAL REPORT FOR 1912 OF HEALTH COMMISSIONER J. M. PERKINS.*

	Cases.	Deaths.	1911
Diphtheria	324	12	(721-37)
Scarlet fever	419	18	(491- 9)
Typhoid fever	499	30	(329-39)
Measles	72	1	(2212-44)
Chicken pox	321	0	(228- 0)
Small pox	48	0	(472- 0)
Eryipelas	97	19	(105-12)
Whooping cough	263	20	(65-14)
Mumps	80	0	(11- 0)
Meningitis	1	13	(-62)

(28 deaths simple meningitis.)

Showing that physicians are not reporting meningitis.

Births 2,686

(The fact that physicians fail to report births makes our birth record appear 727 less than the death rate.)

Deaths—

1. General diseases	1,149
2. Diseases of nervous system and organs of sense	257
3. Diseases of circulatory system ..	338
4. Diseases of respiratory system ..	417
5. Diseases of digestive system	222
6. Diseases of genito-urinary apparatus and adnexa	311
7. Puerperal state	28
8. Diseases of skin and cellular tissue	14
9. Diseases of organs of locomotion ..	2
10. Malformations	16
11. Early infancy	205
12. Old age	124
13. Affections produced by external causes	189
14. Ill-defined diseases	3
15. Still births	138

Total..... 3,413

Total deaths from tuberculosis of all kinds662

Total number premises inspected by sanitary division	147,881
Total number plumbing permits issued	2,335..
Total number drainage permits issued	2,053
School children examined ..	9,634
School permits issued	8,764
School permits refused	900
Patients in Sand Creek Hospital.....	37
Patients in Steele Hospital.....	353
Collections at Steele Hospital.....	\$2,265.32
Patients at County Hospital.....	2,643
Monthly average	322
Insane patients	428
Tubercular patients	36
Collections	\$4,090.77

City Physicians—

Visits made	2,118
Office cases treated	6,640
Total patients treated	8,758

Bacteriological Department—

Primary cultures	4,576
Secondary cultures	1,936
Total cultures	6,512

Meat Department—

Cattle killed	26,975
Calves killed	9,518
Sheep killed	44,438
Hogs killed	40,466
Cattle condemned	238
Calves condemned	77
Sheep condemned	217
Hogs condemned	254
Buffalo condemned	1
Primal parts condemned (pounds)....	53,939

Milk Department—

Samples milk tested	1,277
Samples cream tested	586
Average test of milk	3.4
Average test of cream	19.
Dairy inspections	550
Creamery inspections	238
Store inspections	784

*The full report of Dr. Perkins is now in press and will soon be distributed to the physicians of Denver.

PERSONALS

By the Editor and Associate Editors.

Dr. G. A. Angus has removed from Brighton to Omaha.

Dr. Worth of Wray, Colo., visited Denver last month.

Dr. Henry B. Frosh has removed back to Denver from Pine.

Dr. John Lindahl has removed to 1436 Glenarm place, room 19.

Dr. Eugenia Barney of Sterling, Colo., was a recent visitor in Denver.

Dr. J. N. Vroom made a trip to Chicago the latter part of January.

Dr. J. E. Marshall of Pueblo spent the first week of January in Pittsburg.

Dr. Clare Gouley of Laramie was in Denver the first week of the new year.

Dr. and Mrs. B. Steinberg have returned from several months' visit in the East.

Dr. J. N. Hall spent a fortnight last month with the Mayos in Minnesota.

Dr. A. T. Monismith of Fort Lupton visited Denver professionally last month.

Dr. Matt Rothwell of Telluride is spending a few weeks visiting relatives in Denver.

Our associate editor, Dr. E. V. Graham, has removed from Silver Plume to Breckenridge.

Dr. and Mrs. Alfred A. Blackman of Colorado Springs are enjoying the ocean breezes at Palm Beach.

Dr. Wm. O. Sheller of Lamar took in the

great stock show in Denver the fourth week of January.

Dr. P. V. Carlin, accompanied by Mrs. Carlin, is taking a well earned vacation by way of Honolulu.

Dr. and Mrs. Randolph Hudston are now in London, where the doctor will continue his medical studies.

Dr. J. E. Peairs of Pueblo was called to Kansas City, the last of December, by the illness of his brother.

At the beginning of the year 1913 the Medical Society of the City and County of Denver had 327 members.

The 183 proprietors of drug stores in Denver are talking of establishing a mutual jobbing house of their own.

Dr. J. A. Black of Pueblo was confined to his home, the mid-week of January, with a severe attack of grippe.

Dr. S. B. Buckley, the pioneer South Side physician, has been sick in St. Joseph's Hospital for several weeks.

Dr. Wm. H. Sharpley has been appointed chairman of the committee on medical affairs of the Colorado senate.

Dr. James R. Arneill was summoned to California, the middle of January, by the sad occasion of his sister's death.

Mrs. Mary B. Ordway, wife of Dr. L. S. Ordway, a retired physician of this city, died on Jan. 6th at the age of 70.

Dr. Frost C. Buchtel is receiving congratulations anent a certain fine, small boy, who arrived the third of January.

Dr. F. W. Buck, of Kit Carson county, has been appointed a member of the special legislative committee working for good roads.

Dr. Horace C. Dodge, of Steamboat Springs, was summoned to Boulder to attend the funeral of his mother, early in January.

Dr. Frank R. Spencer has been chosen president of the Boulder County Medical Society; Dr. F. H. Farrington, secretary-treasurer.

Judge Greeley W. Whitford announces that he has resumed the practice of law, with offices at 360-364 Gas and Electric building.

According to the Pueblo Chieftain, prospective school teachers in Trinidad must pass a physical test before they can get positions.

Dr. Frank M. McCartney's 9 a. m. Saturday clinics at St. Anthony's are proving popular with both medical students and practitioners.

Dr. E. F. J. Schmitz, of Glenwood, is the new president of Garfield County Medical Society. Dr. A. E. Gill, of Gulch, is secretary-treasurer.

Dr. Leo A. Sutter, recently of the Boulder-Colorado Sanitarium, is serving a six months' internship in the Massachusetts General Hospital.

We are pleased to note that Dr. W. C. Kent is around again and about as well as ever, after undergoing a very severe ordeal of blood poisoning.

Dr. Nathaniel Alcock, recently of Chicago, has become associated with Dr. T. A. Stoddard of Pueblo, and will have special charge of the laboratory work.

Dr. P. J. McHugh has been representing the sugar beet industry of his section in the hearing before the Congressional committee in Washington, D. C.

Dr. John W. Seybold has removed to 304-305 Mack building, where he has one of the finest suites in the city and has a perfect equipment for anesthetic work.

Dr. and Mrs. Thomas H. Hawkins will sail from Rome for America in the first week of April, and will greet their friends in Denver about the first of May.

Dr. R. W. Corwin attended the baby show at the Savoy, Jan. 20, and took an active part in the proceedings. He remarked that the show was a "howling success."

Walsenburg schools and places of amusement have been closed, because of a severe epidemic of scarlet fever—about 300 cases with a death rate of nearly 10 per cent.

Dr. J. S. Hasty is representing Baca county in the state house of representatives. Dr. W. W. Rowan represents Ouray, and was a prominent candidate for the speakership.

Dr. H. A. La Moure, who has been assistant superintendent of the state insane asylum for the past year, has been chosen superintendent to succeed Dr. A. P. Busey, resigned.

Dr. R. Albi has resigned the position of superintendent of the Steele Hospital. Dr. Oscar Hayes has been appointed as his successor. Dr. Albi, it is said, will remove to the Pacific coast.

A junior chemist in radioactivity is wanted for the U. S. Bureau of Mines at Denver. Examination is announced for Feb. 26 at various points. Application should be made to the U. S. Civil Service Commission, Washington, D. C.

Dr. Ben. K. Clifford, a talented young practitioner and a graduate of the Denver and Gross College of Medicine, 1909, died at his home in Park Hill, Dec. 28, in uremic coma from acute nephritis.

Dr. Joseph D. Barry died of plumonary tuberculosis, Dec. 28, at the age of 36. Dr. Barry had suffered for many months before his death. He was highly esteemed by those who knew him best.

Dr. Carroll E. Edson has a very interesting paper upon "The Last Illness of Louis XIV," in the December, 1912, issue of the Bulletin of the Johns Hopkins Hospital. The paper was read before the Denver Medical History Club.

Dr. George H. Stover has leased a suite of six rooms (216-224) in the Metropolitan building, which he is fitting up according to the latest and most approved methods of Roentgenology. He will be fully established in his new quarters by the first of February.

The Colorado Osteopathic Association held a two days' session, Jan. 21-22, at the Albany hotel, Dr. George W. Perrin presid-

ing. Dr. C. B. Atken of Omaha, president of the national association, was the chief guest and speaker. Dr. Jeannette Bowles is the newly elected president.

Dr. A. P. Eusey, for the past 13 years in charge of the state insane asylum in Pueblo, has resigned his position, it is said, to become superintendent of the State Home for Mental Defectives at Arvada. Under his regime the population of the Pueblo institution increased from 400 to 1,200.

Dr. S. W. Miller, who graduated last spring from the local medical college, is now serving as interne in the Philadelphia Municipal Hospital, where they have at present 300 cases of scarlet fever. After three months in this institution he will go to Kings County Hospital for twenty-two weeks.

Mr. John Parsons delivered an eloquent address upon "The Problem of Poverty," before the Denver Philosophical Society on the evening of Jan. 2. He contended that a very important cause is the overcapitalization of corporations, leading to high rates and prices in order to pay dividends on watered stocks.

The "Rocky Mountain Public Health Association" (formerly the Colorado Association for the Prevention and Cure of Tuberculosis) held its annual convention, Jan. 20, in the Brown Palace hotel. Several good talks were delivered, and moving pictures were shown in the evening, at which time the banquet was enjoyed.

At the annual meeting and banquet of the Pueblo County Medical Society, held at the Congress hotel on the evening of Jan. 7th, Dr. Bon O. Adams was elected president; Dr. E. A. Elder, vice president; Dr. J. H. Woodbridge, secretary; Dr. Hubert Work, librarian; Dr. A. T. King, delegate to state society; Dr. M. J. Keeney, censor.

The Sisters of St. Francis bestowed upon the members of the staff of St. Anthony's Hospital their customary elaborate annual banquet on the evening of Jan. 23. A full attendance showed appreciation of the generous offerings. With Dr. George W. Miel as master of ceremonies at one end of the table, and Dr. F. P. Gengenbach as chorister at the other end, the evening passed quickly and joyously.

Dr. Harvey W. Wiley, ex-chief of the U. S. Bureau of Chemistry, was the guest of the Denver County Medical Society, at a luncheon given at the Shirley, Jan. 29. A very large attendance paid honor to the distinguished guest and applauded his witty sallies. President Sharpley was chairman of the function, and Secretary Wilkinson saw that everything was arranged in order. The affair was interesting and enjoyable.

The Monday eugenic lunch, given at the Savoy hotel, Jan. 23, was an interesting and inspiring event, enjoyed by about 100 persons, largely members of the medical profession. Dr. Mary E. Bates was an effective toastmistress. Beginning with a short and sensible talk by Governor Am-

mons, over an hour was spent in short and snappy addresses, including one by Dr. Agnes Ditson, whose work in making the "baby show" a success is recognized as indispensable.

Under the presidency of Dr. Wm. H. Davis during 1912, the Medical Society of the City and County of Denver experienced the greatest progress during its existence. Among the many features evidencing good feeling and prosperity, were the monthly noonday lunches at the Savoy, the gift of \$5,500 to the medical library by the corporation of the Denver and Gross College of Medicine, and the final turning over from the defunct Academy of Medicine of the Eskridge fund of \$1,000 and several thousand volumes of medical tomes.

Dr. Mary E. Bates and Dr. Agnes Ditson, who had active charge of the eugenic section of the National Western Stock Show, Jan. 20-25, with the assistance of other physicians, passed upon 250 babies at the health contest and child's welfare exhibition held in the Savoy hotel. It is said that these western babies were considerably above the average; also that each mother was convinced that her own offspring was the finest in evidence. Dr. Mary T. Watts, of Audubon, Iowa, the originator of the eugenic section, honored the meeting with her presence.

The medical ho! pollol were very much in evidence at the annual meeting of the Denver City and County Medical Society, Jan. 7, when in voting for president they turned down that famous surgeon and eminent trustee of the A. M. A., Dr. W. W. Grant, by a vote of nearly two to one in favor of Dr. Wm. H. Sharpley. Dr. Sharpley is a man of deeds, not words, and his excellent work in the state senate, where he has stood, defending the regular medical profession, like Horatius at the Bridge, has amply entitled him to the presidency of the county society. The other officers were chosen by acclamation, as follows: Vice president, Dr. G. M. Blickensderfer; secretary, Dr. W. M. Wilkinson (re-elected); treasurer, Dr. George F. Libby (re-elected); librarian, Dr. A. J. Markley (re-elected); trustee, Dr. Robert Levy; board of censors, Dr. R. G. Walker and Dr. T. L. Howard; delegates to state society, Drs. Wm. H. Davis, Hillkowitz, Early, C. E. Cooper, Shere, and Lingenfelter.

Larimer County Medical Society, regular meeting Jan. 2, 1913. Met in the Y M. C. A. There were present: Drs. Kickland, Hoel, Stuver and Drs. Newsome, Whitehouse and Kingman of the C. A. C. Veterinary College. The minutes of the last meeting were read and approved. Dr. Kickland then read a paper on "The Causes of Increased Frequency of Micturition." He called particular attention to the necessity of careful examination in all these cases, as many were produced by etiologic factors outside of cystitis; e. g., gonorrhoea, tuberculosis or foreign bodies. The paper was a very clear and concise presentation of the subject. It

was discussed by Drs. Stuver and Hoel, as well as by the visiting veterinarians from the college. The secretary called attention to the change in the state society's by-laws, which requires all dues to be paid on or before April 1 of each year, or the delinquents shall be dropped from the list of membership. The question of the annual meeting and banquet in February was discussed.

Adjourned.

E. STUVER.

APOTHEGMS.

The odor of official sanctity is sometimes rather rancid.

The last resort of baffled envy is to try to incite a boycott against the successful rival.

It pays to advertise, and it is not unethical to do so, as long as you do not pay for the advertising.

With certain ultraethical practitioners of medicine the chief question would seem to be whether they are more avaricious or more penurious.

In every profession and calling of society there are always individuals who consider it an honor and a privilege to salute the sacred buttocks of the man higher up.

CYNICUS.

FOREIGN JOURNALS

Translated by Joseph Cuneo, M.D.)

Advantage of Hypodermic Injections of Sahli's Opium (Pantopon), by M. Mazzitelli (*Giornale Internazionale delle scienze mediche*, anno XXIV, 1912.—Mazzitelli has studied in seven patients the action of pantopon, with the object of studying the question whether it is really possible to substitute it for morphine and its derivatives, and he has arrived at the conclusion that it is a remedy capable of giving all the beneficial effects of morphine, eliminating almost its inconveniences. He almost believes, although it is opium, that its prolonged use can do no harm, or have any injurious influence on the mental faculties because of the patient's susceptibility. It is only the physician's sagacity that can avoid all the inconveniences of opium. Even if a product is well prepared, exactly dosed, stable, of a sure action, as pantopon, while containing very little morphine, but all the alkaloids of opium, it cannot give the same effects of the former drug. And, in fact, it acts in intestinal troubles like opium, because administered by the mouth it produces local effects on account of slow absorption. The most important fact is the possibility of substituting it for morphine, because morphine influences the organism in a way quite different from opium; morphine invades in sections and gradually the nervous central system, so much so, that if the dose is progressively increased, it affects, first, the bulb, and in a special way, the center of respiration, in consequence of which breathing becomes more and more superficial and slowed, and finally it affects the spinal cord, determining convulsions with exaltation of the reflexes. Now, Sahli's drug, although it still contains morphine in the proportion of 50 per cent, it gives the same analgesic results as morphine, without in any way diminishing the excitability of the respiration center. To obtain a decrease of the respiratory acts, as would be caused by gram. 0.01 of chlorhydrate of morphine, it is necessary to inject hypodermically grm. 0.04 of pantopon. It is, therefore, not the small quantity of morphine that does not diminish the excitability by not reaching the respiratory

center, as much as the existence of all the other exciting alkaloids contained in opium, which are antagonistic to the same. Bergien has arrived at the same results as Mazzitelli. Therefore, there is no doubt that this new way of administering opium is the most convenient, and that the new drug is worthy, as few new drugs are, of the greatest consideration in comparison even with morphine. As Sahli's new drug does not show any action on the heart and blood vascular system, Mazzitelli is of the opinion that it should be used in many cases, particularly if to the hypnotic action, instead of chlora, paraldehyd, sulphonal and the other hypnotics, it is desired to add an analgesic action.—(*La Riforma Medica*, Naples, August 31, 1912.)

The Treatment of Arteriosclerosis, by Prof. Strubell.—The therapy of arteriosclerosis must be divided in prophylactic and symptomatic. For prophylactic treatment we must understand not only the one that has the object of suppressing the cause of the disease, but also the one that is directed in combatting the initial disorders, for the object of preventing the progress of the disease.

One of the most important prophylactic measures is to combat, in old people, abdominal plethora, because the splanchnic vessels have a prevailing influence on the variations of the arterial pressure. To the patients addicted to sedentary life must be prescribed walking and body exercise. In the meantime their diet must be conveniently regulated, especially if they are heavy eaters, drinkers or suffering from gout.

Other very important measures consist in regulating, or forbidding, tobacco, in carefully treating every renal trouble, even the slightest one, and in combatting syphilis if there is any indication of it. Besides, taking in consideration the psychic—nervous condition in the etiology of tuberculosis, it is important to instruct the patients to avoid, as much as possible, all causes of excitement and to endeavor to lead, as much as possible, a quiet life.

To fight the increase of arterial pres-

sure, even in the initial period or presclerotic stage (pseudo-angiosclerosis), there is nothing superior to the hydro-electric bath with alternate current. Professor Strubell will soon publish a work on this treatment. He has used it for eight years with excellent results. It is preferable to carbonic acid baths, because the bath with alternate current has an exact modality, so that it can be conveniently regulated in every single case, while the carbonic acid baths, whose use cannot be, at least for the present, well regulated, in some cases do more harm than good.

To lower the arterial pressure massage and prolonged tepid baths are very useful.

In regard to the iodid treatment. Strubell calls attention to the fact that iodid of sodium should be preferred to the iodid of potassium, because this last one, like the salts of potassium in general, is a real cardiac poison. Strubell was able to kill dogs with a relatively small dose of iodid of potassium, while he could not obtain the same effect with very strong doses of iodid of sodium.

Among the recent iodine preparations, one of the best, probably preferable to any other one, is iodoglitine. It has not a pleasant taste, but it is efficacious in small doses (1-3 tablets pro die). It is rapidly absorbed and it is slowly eliminated.

The use of mineral waters (Marienbad, Kissingen, Homburg, and others similar) is undoubtedly very useful in lowering the arterial pressure and activating elimination, as Basch has demonstrated in his extensive researches.

In advanced stages of arteriosclerosis, besides the above mentioned treatments, the heart remedies are of the greatest importance. In the cases in which the heart is still in a fair condition and gives no signs of weakening, the doctor must not resort to digitalis, for the purpose of combatting incipient circulatory disorders, but he must employ the tincture of strophantus. This remedy, combined with the internal use of the mineral water of Marianbad, or some one similar, massage and baths with the

alternate current, works wonders in cases of arteriosclerosis with incipient cardiac weakness. When we are dealing with an advanced weakness of the heart, due to anatomical alterations more or less serious of the myocardium, with marked dyspnea, enlargement of the liver, bronchial symptoms, edema, etc., then digitalis is the remedy that must be used. Strubell says that in all cases in which a prompt action is desired, the drug must be used intravenously, and that Golaz's preparation of digitalis is the best for the purpose. The effect of the drug is so prompt that anybody using it once, in those cases, will never give any more digitalis by the mouth. It is well understood that after giving in the emergency of the moment one intravenous injection, the treatment may be continued by giving digitalis by the mouth.

In the last stages of arteriosclerosis the treatment is essentially symptomatic; for instance, we must combat edema with cardiac tonics and diuretics.

In regard to the use of wine and tobacco, we must not be over rigid. We must consider that in small doses alcohol may be useful as a heart stimulant, and that smoking, once and a while, even a cigar helps expectoration, which is very important in arteriosclerosis. We should not forget that if we deprive an old patient, who has had already to give up so many things, of even the smallest pleasures of life, such as a cigar or a sip of wine, existence has no more attraction for him and he may commit suicide. Instead of discouraging the patient, we must try to elevate his morale, and we certainly can do so by allowing him the use of small quantities of things practically harmless.

Even in sexual intercourse, it is not essential to insist upon absolute continence, but the patient should be warned that intercourse must not take place right after drinking wine or any other alcoholic beverage, nor in any other unfavorable condition.—(*Deutsche medizinische Wochenschrift*, No. 45, 1912). (From "*La Riforma Medica*," Naples, Dec. 14, 1912).

BOOKS

New Aspects of Diabetes; Pathology and Treatment. By Prof. Dr. Carl von Noorden, Professor of the First Medical Clinic, Vienna. Lectures delivered at the New York Post-Graduate Medical School, New York. Price, \$1.50. New York; E. B. Treat & Company, 1912.

This masterly monograph is reviewed editorially in the present issue under the title, "The Latest Word on Diabetes." It is a book which should be in the working library of every general practitioner.

The Medical Epitome Series; Physiology.—A Manual for Students and Practitioners, by A. E. Guenther, Ph.D., Professor of Physiology in the University of Nebraska,

and Theodore C. Guenther, M. D., Attending Physician, Norwegian Hospital and Visiting Physician Tuberculosis Clinic of the Bay Ridge Hospital, Brooklyn, N. Y. Second Edition, Thoroughly Revised; Illustrated. Lea & Febiger; Philadelphia and New York..

This little volume, now in its second edition, well deserves its growing popularity. It is well written and to the point, and is brought down to date. The latest ideas and facts are embodied briefly, but clearly in the text, while the list of questions at the end of each chapter serves to impress the many facts given in the text.

T. R. L.

Progressive Medicine.—A quarterly digest of advances, discoveries and improvements in the medical and surgical sciences. Edited by Hobart A. Hare, M. D., assisted by L. F. Appleman, M. D. Dec. 1, 1912. Philadelphia: Lea & Febiger; \$6.00 per annum.

The present issue, which is No. 4, Vol. 24, is the usual complete and thorough digest of the subjects covered. Under "Diseases of the Digestive Tract and Allied Organs, the Liver, Pancreas and Peritoneum," Edward H. Goodman brings out many points of great value to clinicians. In his section on diseases of the kidneys, John Rose Bradford reviews, *inter alia*, the continued observations of Banninger upon 396 apparently healthy men who were first discovered to be albuminuric upon presenting themselves for life insurance. Charles W. Bonney gives a full account of the past year's progress in genitourinary diseases. Joseph C. Bloodgood contributes his customary excellent surgical digest upon shock, anesthesia, infection, surgery of the extremities, fractures, dislocations and tumors. The general practitioner will find not least interesting and valuable the "Practical Therapeutic Referendum" by H. R. M. Landis, which fitly closes the volume.

E. C. H.

A Manual of Practice of Medicine. By Hughes Dayton, M. D., Associate Attending Physician, New York Hospital; Formerly Instructor in Physical Diagnosis, Cornell University Medical School, New York; 326 pages; 12 mo., Lea & Febiger, publishers, New York and Philadelphia.

Many times it becomes a real pleasure to review a work that is really condensed to the practical purposes of the busy physician and for every day use. Verbiage has ceased to have its former virtue in print, and when one is tired, or in a hurry, if he is in position to pick up a volume and by little effort can get the real points desired without "foam, broth or blubbers" so common in many of our medical books, life seems to have some real value, and our profession added pleasures. We do not object to large volumes, if they contain actual values shorn of needless explanations. Conceit makes us think that where writers know but little they are compelled to use words to cover the deficit. The point is often left in a shadow, while the ruffles of extra explanations are prominently in the foreground. Dr. Dayton has a nice, neat, handy, useful, ready reference work, in his revised edition of the practice of medicine.

LEWIS.

International Clinics.—A quarterly of illustrated clinical lectures and especially prepared original articles by leading members of the medical profession throughout the world. Edited by Henry W. Cattell, A. M., M. D., Philadelphia. Vol. IV.

Twenty-second series, 1912; price, \$2.00. J. B. Lippincott Company.

Among the twenty-seven papers in the foregoing volume of this standard quarterly, each reader will find several of special interest and value to himself. A new and promising field of therapy is opened in Wm. N. Berkeley's "Parathyroid Treatment of Paralysis Agitans." Albert Abrams continues his series of articles upon mechanotherapy, his latest subject being the treatment of exophthalmic goiter. Thomas R. Brown elicits important interrelations in his paper entitled "Gastric Dyspepsia Due to Intestinal Diseases and Intestinal Indigestion of Gastric Origin." David M. Greig reports a case of stab-wound of the heart with recovery. Thomas W. Harvey contributes a brief but interesting biography of Benjamin Rush.

E. C. H.

Muscle Spasm and Degeneration in Intrathoracic Inflammation, and Light Touch Palpation. By Francis Marion Pottenger, A. M., M. D., LL. D., Medical Director of the Pottenger Sanatorium for Diseases of the Lungs and Throat, Monrovia, Cal. Octavo; 16 illustrations. Price, \$2.00. St. Louis: C. V. Mosby Company. 1912.

This interesting monograph, as indicated on the title page, is concerned with the importance of muscle spasm and degeneration as diagnostic aids and their influence in producing the well established physical signs; also the possibility and practicability of delimiting normal organs and diagnosing diseased conditions within the chest and abdomen by very light touch. The somewhat limited personal experience of the reviewer would bear out the author's contention as to outlining the heart by palpation, or better, by palpatory percussion. The author employs light touch palpation successfully in many other pathologic conditions, particularly infiltrations and cavitation of the lungs. His methods and the rationale of his results are fully described in this volume, and they are worthy the careful consideration of every practitioner who is interested in the physical diagnosis of thoracic and abdominal disease and tumors.

Physical Diagnosis. By Richard C. Cabot, M. D., Assistant Professor of Medicine in Harvard University. Fifth edition, revised and enlarged. New York: William Wood and Company, 1912.

As a teacher of physical and differential diagnosis, Cabot is probably unexcelled. The foregoing volume is the latest word upon the subject. As a writer the author is always clear, terse and forcible. He portrays things as they are, in proper perspective, and is never lacking in common sense. The last edition of this notable work is profusely and handsomely illustrated, including a colored frontispiece plate of a case of argyria.

Utah Medical Journal

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THE HOSPITAL SUPERINTENDENT

It is well known that the majority of hospital superintendents when appointed have not had sufficient training to enable them to competently discharge the duties of office, said Dr. Thomas Howell at the recent meeting of the American Hospital Association.

A hospital superintendent does not need intellectual brilliance, but he does need practical experience. He should have at least a superficial knowledge of a great number of things, such as engineering, laundering, carpentering, painting, plumbing, bookkeeping, the purchasing, preparing and serving of foods, the admitting, assigning and discharging of patients, etc.

He must also have had training as an organizer and as an executive. These can be learned only by hard, patient work. If he has no knowledge of these things his officers and employees will show him little respect, and he will have an uphill fight to maintain discipline and order, and without discipline and order a hospital cannot be efficient.

The hospitals are training doctors and nurses who leave the institution just about the time they become useful. Why shouldn't they also train superintendents?

PROSTITUTES PROVIDE \$3,934 TOWARDS SALT LAKE CITY TAXES.

During 1912 fines and forfeitures aggregating \$9,870 were collected by the criminal division of the city court. More than one-third of this amount was contributed by women of the half-world, the exact figure of their contribution under charges of keeping disorderly houses—resorting to disorderly house and vagrancy being \$3,934. The total receipts from the same sources for 1911 were \$4,365.

Of this amount not one cent has been spent directly for the benefit of these unfortunates. Some one of them perchance the loved daughter of a friend whom we fondled as a child only a few short years ago. Felons are received into our penitentiaries and sent to the prison hospital for treatment of their

diseases, including venereals caught from these very women who have contributed during the past year nearly \$4,000 to the city treasury. These women are foully diseased and capable of spreading the most horrible and loathsome of contagious diseases amongst, not only their patrons, but indirectly innocent women and children, as well as the public at large. No attempt, however, is made to protect the **public health** by their quarantine or cure, as is done in the case of convicted felons. The only object of the city fathers seems to be to collect fines, etc., for the benefit of the city treasury and to make things so unpleasant that they perforce migrate to other cities or towns in this state or to other states, regardless of the danger of conveying infection to others. Thus gonorrhea and syphilis is spread from city to city, and state to state, from bakery to cook-shop and candy kitchen to drug store. Moses appointed three cities of refuge, but for the unfortunate prostitute and her pimp every city or town is a city of refuge, as long as she earns enough money to pay their police fines. Has not the time arrived for our legislators to appropriate the moneys received from these fines and forfeitures for the benefit of the unfortunates who pay them by at least attempting to render them non-infectious before inviting them to "hike" to the next city or state?

ENDORSEMENT OF SOCIOLOGICAL LAWS.

The legislative committee of the Utah Federation of Women's Clubs met at the Hotel Utah on the 9th of January to consider the four bills prepared by Dr. Clift to carry out the resolutions passed by the State Medical Association at Ogden in September last. Dr. Clift, by invitation of the committee, explained the purpose of each bill and the existing conditions calling for such laws, which would be met by their adoption. An abstract of the principal points in his argument appears in this issue of the Journal. Judge McMasters of the Salt Lake Juvenile Court was also present and urged the necessity for the proposed laws in connection with his work. The legislative committee of the Federation will actively support these bills in the house and senate.

The annual meeting of the Municipal League of Utah, comprising the mayors and officers of all cities of the second and third class, was held at American Fork, on the 10th and 11th of January. Dr. Noyes of that city being president. The question of the conservation of the public health was dealt with by Dr. W. R. Calderwood, of Salt Lake, and after a lengthy discussion, a resolution was adopted, endorsing the four bills carrying out the resolution of the State Medical Association at Ogden in September last.

Governor Spry in his message to the Utah legislature has endorsed the sterilization law.

IS THE COST OF MAINTAINING THE PUBLIC HEALTH REPAID TO THE TAXPAYER?

FREDERIC CLIFT, M.D.,
Layton, Utah.

"The protection of life, property and the conservation and promotion of Public Health are the fundamental duties of Government."—President Taft.

The greatest scourge to the **public health** and **well-being** of the state is venereal disease—the result not alone of public prostitution, but of clandes-

tine prostitution as practiced by both men and women. Let us consider:

(1) Gonorrhea and syphilis undermine the health of at least 50 per cent of our young men—the fathers of the next generation. During the past twenty years these diseases have in this state increased from almost nil to alarming proportions as can be shown by the records of the Juvenile Courts, the State Mental Hospital, the State Industrial School and the State Prison.

(2) Of these boys who have been infected—and who are not cut off in their prime—seven out of ten will suffer from the latent effects of these diseases in the declining years of their lives. Paresis, locomotor ataxia, arterio-sclerosis are the resultant products of “wild oats” in the guise of syphilis—syphilis in itself is curable, but the “wild oat” seed once sown is never eliminated so far as latent results are concerned. So, too, gonorrhea sets up latent inflammation of the prostate gland and subsequent bladder troubles—the curse of the declining years of most of our older men. These troubles are only too often the direct product and result of an uncured or only partially cured gonorrhea, and all this largely the result of the familiar but monstrously dangerous assertion of the corner druggist or barber that “he would just as soon have ‘clap,’ as a bad cold.

(3) Of the unfortunate girls who marry these at some prior time infected boys, only too many find their way to the operating table for removal of diseased ovaries, pus tubes, etc., and are permanently rendered sterile and incapable of bearing children—not a few actually losing their lives within a few months or years of their marriage. The parents often wonder why their strong and hitherto healthy daughter should suddenly become an invalid and die so soon after her marriage, with suave and handsome John, little dreaming that it

was caused by the sowing of John’s “wild oats” in their daughter’s body. A certificate of John’s health before marriage would have saved her life.

(4) Of the children which are born to these boys and girls who have at some time been infected, the majority of those who come into the world alive will be of a defective type—some degenerate both physically and mentally, other epileptic or degenerate in lesser degree. All these “weaklings” if not absolutely dependent upon the charity of the state during the greater part of their lives are acknowledged to be not “fit” for the battle of life.

(5) “I will visit the sins of the fathers upon the children unto the third and fourth generation.” This is absolutely true, for the children, if allowed to procreate will produce others like unto themselves, until in the “n”th generation they have become physically impotent or potentially so by confinement in our state insane or other asylums for degenerates.

(6) Our palatial homes for the insane, the feeble-minded, the epileptic, the deaf, dumb and blind, the state prison for our criminals and the reform or industrial school are all growing larger and larger every year; the percentage of our degenerates being greatly in excess of the natural increase in our population.

(7) These homes, prisons and schools cost money to build and every legislature is called upon every two years or so to add extra wards, cottages or accommodations for the increasing number of these defectives. Their maintenance is a perpetual drain upon the state and this drain will increase year by year as long as these degenerates and defectives are allowed to procreate without restraint and contrary to the laws of nature. A sick dog or animal is an outcast from its mates and sexual gratification, but the “human” is selfish and whether well or sick usually cares only for its own comfort and the

gratification of its desires. One author says: "Man is born without a conscience. He has no moral sense or will. **These he must acquire.**"

Dr. Goddard in his book, "The Kallikak Family" demonstrates most forcibly that the feeble-minded in our midst constitute a distinct menace to our social life. From their ranks are recruited most of the criminals, prostitutes, paupers and the worthless members of every community. Decent citizens pay a heavy price for these hereditary perpetuations. Men sit calmly by and allow the criminal to procreate his own kind, the idiot to beget the idiot and the harlot to give birth to the illegitimate seeds of concubinage. While the degenerate classes multiply, the tax rates continue to increase.

Our taxes are 40 per cent. higher than they would be if this problem were met rationally and scientifically.

In all the material things of life the financial end is considered and improvement, including the elimination of the useless, is the ultima thule.

The problem of dealing with mental defectives as a matter of fact touches the pocket of every citizen, for be he property owner or renter, every man directly or indirectly contributes his proportion of city, county, state and federal taxes. Every man in every community is paying his mite—and no inconsiderable mite it is to support prisons, jails, insane hospitals, alms houses and the special institutions made necessary for the care of our great herd of mental defectives.

Decent normal citizens are being continually robbed of hard earned money; feeble suffering children are being brought into the world every year, little rickety, syphilitic, blind bundles of festering humanity, a burden on themselves and society, all because the public is calloused to the knowledge and sight of misery, or because it does not think, or know or care.

It objects to highway robbery, but

condones this insidious form of robbery, accompanied by suffering.

The public conscience should be aroused to the evils attendant upon feeble-mindedness, so that the subject could be treated fearlessly and firmly.

We are positive in the belief that sterilization of criminals and mental defectives of all classes is logical, sensible and effective. The operation is trivial and harmless and absolutely prevents procreation. If this were to be carried out many of our institutions could be closed, our criminal classes would be diminished, epileptics, inebriates and the various types of persons of deficient mentality would be startlingly less and society would eventually be raised to a higher plane.

A united effort on the part of medical societies and civic organizations could do much to bring about sterilization laws. Eight states, or one-sixth of those in the Union, have wearied of the increasing burdens put upon them by these unfortunate classes and have enacted laws calling for the sterilization of certain prescribed persons. These laws are admirable as far as they go, but they are not sufficiently sweeping.

When a man suffers from a gangrenous leg, his surgeon does not amputate his toes. He goes to the bottom of things and the leg is taken off.

It is not enough to sterilize a man who has been convicted of certain serious offenses against the state. Any person guilty of a felony showing premeditation is not worthy of procreating his kind and he should be sterilized.

As a standard for sterilization we would take the individual who shows tangible evidences of defectiveness. We would separate the sheep from the goats and see to it that the unfortunate ones be for ever prevented from encumbering the earth with their offspring.

Doctor Bruce Smith of Toronto well states the question: "What avails the continuous increase of hospitals, asy-

lums, and similar institutions if the number to occupy these grows faster than the accommodations? How can we possibly leave the world better for our work if we do not at least begin some action to stop this vicious stream at its fountain head?" It seems to be the opinion of the majority that restriction of propagation is the only solution for the relief of this downward tendency, but the question is how to bring this restriction about in the proper manner. The education of public opinion has been suggested, so that those from defective parentage will, in the face of public opinion, abstain from marriage; this seems absurd, for even if marriage might be limited, which is to be questioned, it is well known that marriage is not necessary to propagation in this class. Segregation is out of the question, first from an economical standpoint, and secondly because many of these individuals would be fairly valuable citizens and be able to care for themselves if it could be so arranged that they were unable to propagate their kind. Under present conditions the state cannot take charge of those of defective mentality who have committed no crime, or who have not been committed to its care unless the same has been requested by proper authorities; but it certainly has the right to take those who have been legally committed to its charge and deal with them so that they will not be a menace to this or future generations. Indiana, Connecticut, Delaware, and Michigan have passed laws preventing marriage among defectives. Indiana, Oregon, Washington, New Jersey, New York and Connecticut have also laws providing for the sterilization of defectives. Dr. H. C. Sharp of Indianapolis, who has performed the operation known as vasectomy several hundred times, states "he has never seen any bad results; on the contrary, the patient becomes more pleasant, of brighter intellect, ceases

his bad habits, and frequently advises his fellows to submit to the operation for their comfort and good. As you know, this is a simple operation occupying only a few minutes of time and a local anesthetic. It consists of ligating and resecting a small part of the vas deferens in the male; the corresponding procedure in the female, the removal of a small part of each Fallopian tube, is more difficult. "These states that have taken a step forward are to be commended for their enlightened action in this direction. Pearson says: "Today we feed our criminals up, and we feed up our insane, we let both out of the prison or asylum reformed or cured, as the case may be, only after a few months to return to state supervision, leaving behind them the germs of a new generation of deteriorants."

In conclusion it seems that the only solution of this peril is a broader dissemination of knowledge, and legislation regulating marriage and permitting sterilization of the defective classes. Let us hope that our next legislature will see the need of these laws. **Selection of parentage is the only effective process known to science by which a race can continuously progress.**

Prostitution and the procreation of defectives must be regarded as a disease of society's morals and remedial measures must be twofold. (1) Elimination of the "social evil" the *fons et origo* of venereal disease by education. This must be begun at once. (2) Control of the existing disease by the state, county and city authorities. Of course, the ideal solution is abolition, total and absolute. This is not possible of sudden accomplishment. We can only arrive at the ideal by patient, persistent, perpetual effort and by a long process of activity and education. Dr. C. E. Smith of St. Paul in part says, "Suppression does not suppress, it merely turns an open evil into a secret one causing clandestine vice to increase. All attempts

to better the situation must be based on the recognition of the business, first as existing, and second as being an evil against which all action must be gradual and wise. Health laws should be a part of the general campaign of education. Break down the superstition of male continence being unhealthy. Establish a respect for chastity. Teach the keeping of a mind free from lust and a body in health. Teach the duties of marriage and its responsibilities. Teach our girls to demand from their boy associates a higher ideal and code of morals. The double standard of morals can be broken down by educating the girls to demand more of the men." As the educator must ever keep in advance of his pupils—so must those who study and teach sociology keep in advance of public thought—so, too, legislators must be educators. They must lead and ever keep a little ahead of public opinion. In all legislative bodies there are two leading parties (1) conservative, keeping just a little behind public opinion; (2) Leaders, in this country, republicans who lead in legislation by keeping just a little ahead and actually **doing** what the people are **beginning to think about**.

The passage by the Utah legislature of a law requiring a certificate of health before a license to marry—of a law making it an assault and a crime to communicate a venereal disease—of a law regulating the sale of gonorrhea and syphilis cures—and, of a law to prevent the procreation of criminals and defectives, will do more to educate our boys and girls as to the evil results of loose living than all the "preachers" in the state. These laws will make them think. They will be compelled to recognize the pitfalls which otherwise will never be appreciated however lovingly and earnestly brought to their attention by their parents and teachers.

The great purpose of these laws is:

(1) To compel all those infected with

these foul and loathsome diseases to at once take the proper and necessary steps to rid themselves of disease. For instance the man who wants to marry.

(2) To protect the public, including our own dear selves, from actual contact and disgusting thoughts as to the possible contamination and infection arising from the employment of such infected persons in restaurants or other places where food is prepared for our use, by enabling the health authority to step in and say that such a person shall not handle our food or continue his or her employment in cases where he or she is in a condition to infect others.

Other diseases mainly affect the individual and are quarantinable if deemed necessary, but venereal diseases are not quarantinable according to the present views of our legislators, although they do most seriously affect, not only the moral and physical condition of the individual, but also society through economical and material losses and probable hereditary transmission to the third and fourth generation.

Dr. A. L. Walbarst of the Beth-Israel Dispensary, New York, in his paper entitled "The Problem of Venereal Prophylaxis," says:

Before concluding, it seems well to mention some special lines of attack that may also be followed with good results, especially in the prevention of venereal infection in the innocent:

(1) As family advisers, medical men are in a position where they can talk and act frankly. The physician should use his influence wherever possible, to see to it that his patients about to marry are not suffering from the remains of a former venereal infection; and fathers of young women who are about to enter the new life should be taught to demand of their daughters' prospective husbands a clean bill of health, signed by a reputable physician, after a careful examination. The pub-

lie should and can be educated up to this requirement.

(2) There should be severe legal penalties against men or women who marry, knowing that they are still suffering from infectious venereal disease.

(3) Those who are infected with syphilis, gonorrhea or chancroid should be taught by their physicians the dangers of infecting innocent persons with whom they may come in contact, and should be instructed how to avoid this risk. A brief, well-written and plainly worded little pamphlet or tract should be given to every patient in private or institutional practice.

(4) Barbers, dentists, manicures, chiropodists, nurses, midwives and physicians, too, should be reached by a systematic campaign of instruction and warned about the care of their hands, instruments, dressings and utensils, so as to reduce to a minimum the possibility of transferring infection from one patron to another and to themselves.

(5) Waiters, bartenders and others who serve and prepare food and drink in public places, and their employers, as well, should be similarly reached and warned and instructed as to the importance of cleanliness, not only of their own persons, but of dishes and utensils they handle. The abominable and dangerous practice of removing cups, glasses, etc., with the fingers inserted inside the vessel should be broken up. The public should be warned of the dangers lurking in bar glassware, etc., and should demand that the most scrupulous cleanliness be employed in hotels, restaurants and cafes. The filthy roller towels found in these places should also be abolished.

(6) Occasional medical examinations of persons engaged in the preparation and serving of food and drink should be encouraged, to determine the presence of possible infectious disease.

(7) Nurse-girls, domestics and maids

should not be permitted to sleep in the same beds with children, for obvious reasons.

In short, I am strongly convinced that an intelligent, well-directed effort along the lines herein indicated, will accomplish a great deal toward decreasing the sum total of popular ignorance on the subject of venereal disease, and simultaneously will reduce the amount and extent of venereal infection and its consequent miseries.

The last few years has seen a rapid development in the discussions of sexual problems. The people are being educated. Prostitution will be eliminated just as fast as we introduce and put into practice health laws, which will meet the different classes of social and moral law-breakers, face to face, at all points of the compass and compel them to be clean. Compelling them to be clean and to produce certificates of health will make the life of the impure "not worth living," and they will seek other pleasures and methods of living. Social vice is filth, both in habits and talk. Quarantine the filth and create new environments for the sinner.

The cost of carrying out these health laws will be repaid:

(1) By the improved health of the people who will be able to earn more and thereby pay more taxes.

(2) By the reduction in the permanent charges (paid out of our taxes), for the maintenance of hospitals for the insane, industrial schools, state prisons and similar institutions.

(3) By doing away with the necessity for biennial appropriations for new or additional buildings in which to lodge and take care of the defectives who should never have been born or rather never conceived. In the course of twenty or thirty years the population of our asylums, etc., will be decreased 40 per cent.

DEPARTMENT OF EUGENICS

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PRACTICAL EUGENICS.

The general purpose of the Eugenist is plain—it is to make young people use their reason in the selection of marriage mates—to fall in love intelligently; to control the propagation of the mentally incompetent. The purpose of the London Congress is to study the laws of inheritance and make them known, so that the good sense of the majority of young people drifting toward marriage will lead them to stop and consider if the contemplated union will result in healthy and mentally well-endowed offsprings.

Conscious selection must replace the blind forces of natural selection. Eugenics is the practical application of the doctrine of evolution—it teaches the generation and survival of the fittest.

The International Congress on Eugenics meets every three years. The next meeting, in San Francisco or Paris, will be held in 1915.

ASEXUALIZATION OF THE UNFIT.

Barr made a personal study of 4,050 cases of imbecility, and found that 65.45 per cent. were caused by malignant heredities; of these 25.43 per cent. were due to a direct inheritance of idiocy, and 6.91 per cent. to insanity. He cites the following examples of the influence of heredity in the production of the unfit and criminal members of a community. A man of thirty-eight years is the father of nineteen defective children, all of whom are living; he and his wife are mentally below par. A man has two daughters and one illegitimate grandchild, all feeble minded. A family in seven generations numbers 138 individuals and records ten stillbirths, sixteen insane, seven imbeciles, three epileptics, and thirty-two with noticeable mental peculiarities; eighty are apparently normal, but are hopeless slaves of a neurotic heredity. Of fifteen imbecile girls, three were prostitutes, nine had one illegitimate child each (two being the result of incestuous intercourse with brothers), one had two illegitimate children, two epileptics had three and four idiotic children respectively. Four feeble minded women had forty illegitimate children. Barr advocates the compulsory asexualization of the unfit as the only truly effective and logical remedy. He says those thus treated are greatly improved, mentally and morally.

AN ARISTOCRACY OF ABILITY.

No one has ever questioned that "blood tells" quite as much in human beings as in animal life. But by the study of eugenics

the right to be well born is now being put on a scientific basis as never before. When the principles of eugenics become a part of common knowledge, their unquestionable wisdom will be sufficient to secure their general adoption.

Lecturing before the American Federation for Sex Hygiene, Dr. Vernon M. Cady said: "Marriages upon these lines will be considered a great honor, and they will be kept untainted by proper stock. We shall then have an aristocracy of ability rather than one of nobility." The speaker cited the Abbott and Herreshoff families as examples of what practical eugenics does in raising the race standard.

By marrying only persons of sound bodies and minds, the family of which Dr. Lyman Abbott is a member, has in three generations produced twenty-five authors, inventors and musical geniuses. In the same time and in the same way the Herreshoff family has produced eleven brilliant boat designers. When the marriage of the unfit is not only discouraged, but actually by law prohibited, there will be produced through the marriage of the fit an "American aristocracy of ability."

From those far distant Biblical days, when Jacob carried out certain principles of eugenics in connection with Laban's herds and flocks, stock raisers have also greatly increased their wealth by like measures, and the magnificent steed "fit to ride and run for a king's life has been evolved from the five-toed animal no larger than a fox; the donkey and his progeny not only have been an important factor in our own aggrandisement, and settled great England's last con-

test with the hardy Boers; to say nothing of the now prolific hen, whose fruitage is at this day being sold by the piece instead of by the dozen or gross. By careful atten-

tion to eugenics we have an aristocracy along all other lines of "fish, flesh and food," and why not in man?—Ed. Southern Practitioner, Dec., 1912.

SOMETHING ON EPILEPTICS.

DR. G. HENRI BOGART,

Paris, Ill.

Every state in the Union has its good points and its bad ones, and in the line of medical progress Illinois is one of the laggards. A very big, very selfish, very evil city dominated by some of the crookedest political gangs in America, who play politics with marked cards as they play poker, for dishonest money makes mere matters of health, or morality, or even of humanity of slight avail.

There are no places here for epileptics, for instance:

There has just been issued a pamphlet entitled, "How the uncared-for epileptic fares in Illinois." The pamphlet is issued by a private committee, not by the state.

From every district in the state an example was selected for an appeal to the people and legislature.

One of these cases is given:

"An Appeal for 'A Minimum' Degradation.

"Tenth Senatorial District.

"E's first spasm came when she was about 6 years of age, but she attended school until she was 21 years old, when it was necessary to take her out. Her family tried to care for her, but as she grew older she would wander away from home and go about on the streets. She became almost nightly the victim of many men. She would be found in a terrible condition of exhaustion and was taken three times to the police station, where in the morning she would be turned out to start over again in her wanderings.

"This was about three years ago. At this time we had her taken to the women's ward in our county jail and a physician was called. She was found to be in a terrible condition. Besides her spasms of epilepsy she had syphilis, and the story she told us was too horrible to relate. The only thing we could do was to send her to our County Farm, where we had a trained nurse, and she was given as good care as was possible;

a course of treatment was directed by the county physician. After remaining there nine months, very much improved, she returned home.

"She remained in her home for six months or more, staying indoors quite closely, until a month before she was sent to Elgin Insane hospital, which was June 25, 1912. During that last month it was impossible for her people to keep her from the streets; they were unable to control her, as she became dangerous. She lost all sense of morality, was in a most deplorable condition morally, physically and mentally.

"The mother told me yesterday that at the time of their last visit to Elgin, two weeks ago, the physician said the spasms were very frequent. She would fall many times during the 24 hours.

Among her other experiences she gave birth to two illegitimate children."

"What Answer to This Mother—Illinois? Fiftieth Senatorial District.

"One of the epileptics in the Fiftieth Senatorial district is a girl of 23. At the age of 8 she suffered an attack of scarlet fever. Till then she was as promising and normal as any little girl. She was returned to her mother after this sickness blind, paralyzed and mute. When she had regained her speech and sight and the use of her limbs, epilepsy developed.

"At the end of her resources, and urged by her friends and family, the mother placed the child in an asylum for the insane, the only place that could be found. She had been accustomed to the best food, delicately prepared, and had never been made conscious of her affliction, never referred to as an epileptic or insane.

"She was terrified at the actions and appearance of her fellow-patients, and deeply offended to be regarded as insane. The mother removed her after two weeks. It took a month in the country and the best care to bring her back to her normal phys-

cal condition, but the mother feels that she can never efface the remembrance of things she heard and saw and experienced in the asylum.

"The mother is a woman of unusual intelligence, and holds an important public office in her community. She constituted herself nurse, and teacher, doctor even, and gave up the years of greatest activity of her life in order to be of service to her child.

"She recently made a trip to Massachusetts to look into the care given epileptics in the colony in that state. As a result she is contemplating resigning her office and moving the family to Massachusetts to establish a residence there for the purpose of trying to get the daughter admitted. She says that this sorrow has aged her twenty years, and has been an incalculable loss to her in time and efficiency, and to the happiness of the family. The mother's only thought now is to make some suitable provision for her child, for the time is approaching when she will no longer be able to care for her."

A few years ago a dear friend of mine appealed to me for help. Her husband was a railroad man, and the wife learned of an epileptic woman who roamed through the freight yards, half dressed, half starved and accompanied by her little daughter, the prey of hoboos, and base men. The womanly woman, who learned of this, undertook to have the woman and child cared for and was unable to have anything done for the poor epileptic, then she appealed to me with pathetic letters, but I was powerless to suggest any remedy, for the laws are silent. Yet had one of the tramps or trainmen in that yard stolen a few pounds of coal, he would have been arrested and punished with celerity and certainty.

Dollars count for more than souls or humanity, but at that, the policy is shortsighted, penny-wise and pound-foolish.

The progeny of epilepsy is almost always epileptic and the horrible damning burden costs ever and ever more and more.

The tragedy, the awful tragedy of the two Illinois women cited is in the children, miserable wretches, predoomed to withering woe. The remedy is so sane and so simple.

Were all epileptics sterilized, there would be decrease instead of increase of this horrible burden upon the race. Any man who would fail to give his vote and influence to a measure, which in supreme mercy and

common economic foresight, will prevent the birth of unfortunates as the two instances used to illustrate this paper, should congratulate himself that he has helped to bring these beings into existence, and that he is himself personally responsible for all the woe and misery and crime which these irresponsibles may do.

DAMAGED GOODS.

Brieux, member of the French Academy, has written three plays which have been introduced to the English-speaking public in a volume prefaced by one of George Bernard Shaw's clever essays attacking some of the stupid nineteenth century conventions which have thus far survived in the twentieth. All of the plays are good, "Maternity" and "The Three Daughters of M. Dupont" appealing especially to those who rebel against the gross materialism of this "business" age, but one of them, "Damaged Goods," is so strictly a medical or hygienic problem that no physician's education can be considered to be completed without a perusal of its truthful and dramatic lines.

Preventive medicine looms big in the future. We all subscribe to such laws as can at present be laid down in furtherance of its beneficial objects. In many states and cities the prevention of the venereal has occupied the thoughts of the lovers of the race, and recently in Indiana the State Medical Society and here in Ohio local boards of health have had under consideration means of prevention of the scourges whose dire effects we of the profession know so well.

The realism and the art of Brieux are shown in that the story is a simple and common one. Georges Dupont has been extremely careful in the selection of his mistresses, and has maintained good health almost up to the eve of his marriage. Then "a lot of idiots" gave him a "farewell dinner and made him gad about with them." These same idiots we have with us here in America. He contracted syphilis. He consults a physician. He is forbidden to marry for at least three or four years. He manages to postpone his wedding for six months. He marries, his wife bears a congenitally syphilitic child; the doctor, brought into the case again, forbids the nursing of the syphilitic baby by the healthy wet nurse, the wife discovers the dreadful

situation and flees with her baby back to the home of her parents. All of this we know quite well; it is even dismally familiar. But this French doctor, in the last act, reads us a lesson that is well worth listening to. Attend to this:

The father of the outraged wife, Loches, deputy for Sarthes, calls upon the doctor, white hot with indignation, and demands a "certificate which will be the basis of our action."

Doctor—* * * You ask me for a certificate in order to prove to the court that your son-in-law has contracted syphilis?

Loches—Yes.

Doctor—You do not consider that in doing so you will publicly acknowledge that your daughter has been exposed to the infection. The statement will be officially registered in the papers of the case. Do you suppose that after that your daughter is likely to find a second husband?

Loches—She will never marry again.

Doctor—She says so now. Can you be sure that she will say so in five or ten years' time? Besides, you will not obtain a divorce, because I shall not furnish you with the necessary proof.

Loches—I shall find other ways to establish it. I shall have the child examined by another doctor.

Doctor—Indeed! You think that this poor little thing has not been unlucky enough in her start in life? She has been blighted physically; you wish besides to stamp her indelibly with the legal proof of congenital syphilis?

Loches—So, when the victims seek to defend themselves they are struck still lower! So the law provides no arms against the man who takes an innocent, confiding young girl in sound health, knowingly befouls her with the heritage of his debauchery, and makes her mother of a wretched mite whose future is such that those who love it most do not know whether they had better pray for its life or for its immediate deliverance! This man has inflicted on his wife the supreme insult, most odious degradation. He has, as it were, thrust her into contact with the street walker, with whose vice he is stained, and created between her and that common thing a bond of blood to poison herself and her child. Thanks to him, this abject creature, this prostitute, lives our life, makes one of our own family, sits down with us at table. He has smirched

my daughter's imagination as he has tarnished her body, and bound up forever in her mind the ideal of love that she placed so high, with heaven knows what horrors of the hospital. He has struck her physically and morally, in her dignity and her modesty, in her love and in her child. He has hurled her into the depths of shame. And the state of law and opinion is such that this woman cannot be separated from this man save at the cost of a scandal which will overwhelm herself and her child. Very well, then, I shall not ask the aid of the law. Last night I wondered if it was not my duty to go and shoot down the brute like a mad dog. It was cowardice that prevented me. Weakly I proposed to invoke the law. Well, since the law will not do justice, I will take it into my own hands. Perhaps his death will serve as a warning to others.

Doctor (putting aside his hat)—You will be tried for your life.

Loches—And I shall be acquitted.

Doctor—Yes; but after the public narration of all your troubles. The scandal and the misfortune will be so much the greater, that is all. And how do you know that the day after your acquittal you will not find yourself before another and less lenient judge? When your daughter, realizing that you have rendered her unhappiness irreparable, and seized with pity for your victim, demands by what right you have killed the father of her child, what will you say? What will you say when that child one day asks the same question?

Loches (speaking before the other has done)—Then what can I do?

Doctor (immediately)—Forgive.

A silence.

Loches—(without energy)—Never.

Doctor—Are you quite sure that you have the right to be so inflexible? Was it not within your power at a certain moment to spare your daughter the possibility of the misery?

Loches—Within my power! Do you imply that I am responsible?

Doctor—Yes; I do. When the marriage was proposed you doubtless made inquiries concerning your future son-in-law's income; you investigated his securities; you satisfied yourself as to his character. You only omitted one point, but it was the most important of all; you made no inquiries concerning his health.

Loches—No.

Doctor—And why?

Loches—Because it is not the custom.

Doctor—Well, it ought to be made the custom. Before giving his daughter in marriage a father ought to take as much care with regard to her husband as a house of business takes in engaging an employee.

Loches—You are right; a law should be passed.

Doctor—No, no! We want no new laws; there are too many already. All that is needed is for the people to understand the nature of this disease rather better. It would soon become the custom for a man who proposed for a girl's hand to add to the other things for which he is asked a medical statement of bodily fitness, which would make it certain that he did not bring this plague into the family with him. It would be perfectly simple. Once it was the custom, the man would go to his doctor for a certificate of health before he could sign the register, just as now, before he can be married in church, he goes to his priest for a certificate that he has confessed. As things are, before a marriage is concluded the family lawyers meet to discuss matters; a meeting between the two doctors would be at least as useful and would prevent many misfortunes. Your inquiry, you see, was incomplete. Your daughter might well ask you, who are a man and father, and ought to know these things, why you did not take as much trouble about her health as her fortune. I tell you that you must forgive.

Loches—Never!

Doctor—Well, there is one last argument which, since I must, I will put to you. Are you yourself without sin, that you are so relentless to others?

Loches—I have never had any shameful disease, sir!

Doctor—I was not asking you that. I was asking you if you had never exposed yourself to catching one. (He pauses. Loches does not reply.) Ah, you see! Then it is not virtue that has saved you; it is luck.

It really is a great pity that this play could not be put upon the stage in Anglo-Saxon America. The agony or remorse of the unhappy victim of the disease, the straight-forward discourse of the physician attempting to do his duty, the horror of the young wife and mother, the tragic readiness of the grandmother to sacrifice either herself or other innocent attendants to save the life of the wretched and infected infant, the vulgar defiance of the wet nurse when she discovered the horrible family secret, and the murderous fury of the bride's father, might stir some of our powerful social forces and our official boards into action looking to the eradication of this one disease. The Society for the Prevention of Blindness might arouse their consciences concerning the other. But, apparently, both according to Brieux's play and to our experiences of every-day life, stupid respectability would rather be syphilitic and ignorant than healthy and enlightened. The sun of the syphilologist is not yet waning. He may take comfort.—*Lancet Clinic*, Dec. 7, 1912.

CRIME AND ITS REMEDY.*

By LADY COOK, nee TENNESSEE C. CLAFIN.

Crime has been loosely defined as an offence punishable by law, but there may be crimes of which the law has no cog-

*The brilliant author of this paper spoke before her time as a prophetess, for many of the sentiments expressed herein have been enacted into laws and others will eventually become parts of our statutes. This article was sent to a member of our editorial staff more than ten years ago and we are unable to learn whether or not it has been published elsewhere. At the risk of repetition we venture to print it, in view of its prophetic utterances, which are so in keeping with the present trend toward a more perfect comprehension of eugenics and the demand for sterilization of criminals and the hopelessly unfit.—*Editor Medical Times*, December, 1912.

nizance. Laws are of many kinds—natural, political, civil, domestic, and so on. As Montesquieu says: "The sublimity of human reason consists in perfectly knowing to which of those orders the things that are to be determined ought to have a principal relation, and not to throw into confusion those principles which should govern mankind. For instance, we ought not to decide by divine laws what should be decided by human laws, nor determine by human what should be determined by divine laws. These two sorts of laws differ in their origin, in

their object, and in their nature." All laws should be protective, even when punitive, and all just law has one of two designs—the protection of the community or the protection of the individual. Yet these form but one ultimate object—the protection of all. So that it would be a paralogism to assert that the good of the individual ought to give way to that of the public, for "the public good consists in every one having that property which was given him by the civil laws, invariably preserved." Also the duty to one's self is stronger than the duty to the community. And as the law of nature is superior to all human laws, so "self-defence is duty superior to every precept." If we were to pursue the subject, we should find that laws have been sometimes more criminal than the offences against which they were directed; that they have been frequently used to manufacture crime in those who have neither injured the individual nor the community; that even beneficent actions have been treated as public offences, and that public offences and private injuries of the gravest character have been completely overlooked. The field, however, is so wide that we can only glance at it as we pass on.

Imaginary offences, as sorcery and witchcraft, have been treated as crimes; scientific discoveries and mechanical arts have met with the same fate; the opinions of the minority have always been heterodox, and heterodoxy has invariably been punished in some form or another. Men and women were burnt alive for their harmless theological beliefs, when thieves and murderers were only branded. So that we cannot always judge of the good or evil of a thing, or even of its magnitude, by calling it crime or no crime. It is true that we do not burn a man now for his belief. We only ostracize him. If the process should ruin him, so much the worse for the man, but why could he not learn to believe like ourselves?

In the limited space of this paper my reflections must be narrowed to a point or two. I shall briefly call attention to conduct that constitutes a crime against society and against individuals, although it is not to be found in our statutes.

If to poison one person be an infamous crime—and no one questions it—what shall be said of him who poisons a multitude, who entails untold sufferings upon innocent

and defenceless generations who for his own wanton gratification gives life to another whom he knows will be cursed with hereditary disease and premature death? If we were not so blinded as we are by customs and selfishness we should regard such an one as a monster of depravity. Daily we see those in whose blood some horrible disease lurks marry and multiply with light hearts and easy consciences. Friends and relations look on approvingly. Reverends and Right Reverends give their benedictions. Remonstrate, and they answer that they leave it all to Providence, as though blasphemy could excuse premeditated guilt. Do they expect to gather grapes from thorns and figs from thistles? Were society wise, it would minimize crime of this nature.

For what peril to posterity can be greater than thus to poison the river of life at its source? What other crime can equal this wholesale dissemination of well-nigh ineradicable disease among the countless sufferers who follow after, to whom the gift of life comes as a curse dowered with evil. Minds and bodies that should have been radiant with joy and beauty are befouled, deformed, blasted, dragged down to unutterable depths of misery and agony. Existence, which comes to each but once, for these had better never come at all. We picture them, like one of old, loathsome, ulcerated without and within, sitting in the ashes of all their spiritual aspirations and human hopes, and we, too, are almost tempted to exclaim, "It is better to curse God and die."

In the presence of such a crime, so common and widespread, how can we be silent? The laws are silent. Our moral and religious teachers are as "dumb dogs." Society, with its cant and hypocrisy, turns up its eyes in pious terror at the mere mention of the subject. As though it could be indelicate to diagnose any form of disease or one more than another; or as if no depravity should be remedially discussed if it happen to be sexual. But if we remember that the sect of the Pharisees is not extinct we also bear in mind that in all ages there have been fearless teachers who refused to hide the truth and humbly following in their steps we have dared to "cry aloud and spare not."

An excellent writer long ago said, "Truth is, in everything, not only the shortest, but the only road to excellence—the only foundation on which everything permanent can

ever be raised, and all ways of evading, alighting, or opposing it are, in fact, only loss of time and hindrance of business in the affairs of men."

The marriages of the physically unfit form only a part of the wedded evil. Loveless marriages are answerable for much. It is with us now as it was in France before the Revolution. "Persons of the rank of nobles were found vile enough to accept in marriage, and to bestow the name of wife on those whose conduct, as well as birth, would otherwise have denied them an entrance into society. Sometimes the same disgraceful bargain was made with those of their own rank, who found a more honorable establishment difficult. The husband sacrificing at once his honor and his rights at the church door, was sent to eat the wages of his base compliance in a distant provincial town. Here his title and his money soon procured him the good graces of some provincial beauty, who consoled him for the contempt with which he had been treated elsewhere, and whose husband imitated his own example of forbearance and submission. The sacrifice of youth and beauty was often made, and made without remonstrances, to deformity, to age, and, even to imbecility, among persons equal in birth, when one of the parties to offer the wealth or brilliant existence in society which was wanting to the other."

We are cheated by words, for these unnatural unions are not marriages. True marriage is a spiritual and mental exosmose and endosmose; each gives of its own to each until both are alike. It is a natural and spontaneous union of ideas, aims, and sympathies. And where these exist rites and ceremonies are superfluous. They can neither give nor take away. For the marriage ceremony is not marriage, but it is merely the public profession of an accomplished fact, otherwise it is morally fraudulent. And if marriage does not precede the ceremony, no real marriage exists.

It is because we attach to the word what rightly belongs to the thing, that an act of nature is stigmatized as a crime.

When women prompted by their own affectionate and generous instincts and regardless of ceremonies have become mothers our social Juggernaut crushes them remorselessly. It brands them as outcasts,

*The Editor of Madame du Deffaud's Letters, 1828.

and thus they hang, drown, or prostitute themselves. Holocausts of little ones, innocent as those of Bethlehem, are annually sacrificed to the fear of this wooden God. What, say you, would you permit "natural" children among us? Most certainly. All children are natural except the offspring of enforced and unnatural marriages.

It is evident to all observers that the prudent and wise are cautious in the exercise of their creative powers, whereas the least fit are the most reckless of consequences. Their criminal folly is thus perpetuated as well as its evil. Who then, it may be asked, shall judge as to fitness? We reply that a jury of matrons could, on examination, easily decide as to the man's general capacity for marriage. If it be said that the unrestricted association of the sexes would increase immorality, we deny it and affirm the contrary. Doctors, for instance; are not more immoral than others, yet they are brought into much closer intimacy with their female patients. These things are regulated by habit and self-respect.

It is sheer childishness to shut our eyes to facts or to ignore the brutal profligacy in our midst. Mirandas encounter Calibans at every street corner. Nor is it as in the classic woods of Greece, where impure Satyrs watched furtively from behind their leafy coverts for a rarely passing nymph. Our modern are elegantly dressed, and leer openly at every pretty woman in our public places.

Nature sterilizes women of immoral lives. Immoral men should be sterilized also, but this can only be done by artificial means. Jesus said, "Some are born eunuchs, some are made eunuchs, and others have become eunuchs for the kingdom of Heaven's sake." The saintly Origen emasculated himself. What has been done from religious, luxury, or choice, may be done again from necessity. It might easily be made a physical impossibility for criminals, hereditary paupers, imbeciles, profligates, and others suffering from gross bodily or mental defects to propagate their failings and their vices.

The scientific improvement of our race is one of the great measures of the future, and will be taken in hand as soon as the nation is sufficiently enlightened as to its necessity. We cannot go on for ever permitting swarms of weak and depraved creatures to flood society with lunatics, idiots, criminals,

and other defective offspring. Their maintenance and control alone constitute a serious menace to the welfare of the industrious and deserving poor. Their contagious and vicious example outweighs the efforts of missionaries and reformers, who are, as it were, for ever rolling a Sisyphean stone. We banish or isolate physical leprosy, and thus extirpate it. Moral leprosy may have to be subjected to similar treatment.

The Spartans afforded a remarkable instance of what could be done by selection, careful breeding, and systematic education. A little state of a few thousand citizens overawed Greece and defied the countless hosts of Persia. Marathon, Salamis, and Plataea ring out clear and spirit-stirring after the lapse of twenty-four centuries.

The early Romans retained much of the Lacedaemonians' spirit. They took especial pains to preserve purity of blood. When Cato lent his wife to Hortensius, it was from no immoral motive, but from a high sense of public duty. Hortensius was a "goodly man," his physical and mental excellencies were appreciated by his friend, and therefore he selected him as his deputy to raise up children to the state. And Cato is esteemed a model citizen and patriot. One of the greatest punishments inflicted on the Romans was the withdrawal of the privilege of lending their wives.

Spartan and Roman requirements differed from ours, and thus our methods must differ also from theirs. We should, however, pursue the same object—the mental and physical perfection of our race—by means suitable to our time and place. Mar-

riage should be resolutely discouraged where the parties are unfit through any disqualification. Where a community has taken upon itself the burden of the support of all, it should have the power of regulating the action of individuals in so far as they create the difficulty. We prevent the inmates of our prisons, workhouses, and asylums from sexual intercourse. We even separate the married. What should hinder us from carrying out the principle farther, and to its full logical extent.

A man imbued with these ideas would no more think of marrying a woman of defective physique or one possessing hereditary taint, than he would of purchasing a broken-winded racer to run in the Derby. However fair she might be, he would institute a careful inquiry into her family history before proposing. And a woman would do the same. She would decline to become the mother of a line of puny and dyspeptic weaklings. Fathers would mate their daughters at least as carefully as they mate their dogs and horses. And the state would make it a serious crime for an unhealthy parent to produce a child. A license to marry should be given by a Medical Board, and not by a priest. Marriage then would be a sacred privilege; it would be highly valued, and so held in much honor; it would be a mark of the worthiest, and would conduce to general emulation in worth. In a word, it would be a reign of the fit, instead, as now, of the unfit. Society would stamp out disease and crime, as it has stamped out the rinderpest. Under such conditions what a glorious country would this be?

REPORT OF BOARD OF MEDICAL EXAMINERS OF THE STATE OF UTAH.

To His Excellency, William Spry,
Governor of State of Utah,
Salt Lake City, Utah.

Dear Sir—In compliance with the statutes we herewith submit you, our report from November 30, 1910, to November 30, 1912.

The present Board, with the retiring members, met at the Commercial Club April 6, 1911.

The quarterly and annual reports were read and other matters of business transacted, and all records and matters of business turned over to the incoming Board.

The new board then went into session and effected the following organization:

President, D. C. Budge, M. D., Logan; vice president, Fred W. Taylor M. D., Provo; secretary, G. F. Harding, M. D., Salt Lake City; treasurer, F. E. Straup, M. D., Bingham City.

The clerk of the old Board, Eli A. Folland was retained.

The following assignments of subjects were made and approved by the Board

Anatomy and Surgery, D. C. Budge, M. D.; Materia Medica and Chemistry, G. F. Harding, M. D.; Medicine and Medical Juris-

prudence, C. E. Osgood, M. D.; Pediatrics, Skin and Venereal, F. E. Straup, M. D.; Physiology, Eye, Ear, Nose and Throat, R. R. Hampton, M. D.; Obstetrics (special), C. L. Olson, M. D.; Pathology and Histology, Clarence Snow, M. D.; Gynecology, Fred W. Taylor, M. D.; Heglene, A. P. Hibbs, D. O.

The examinations have been held quarterly and the following number have been licensed under the various sections of the statute:

Reciprocity, 22; examinations, 49; obstetrics, 19.

Financial Report.

Receipts—

By cash on hand, Nov. 30, 1910....	\$ 275.79
By reciprocity fees.....	1,070.00
By examination fees.....	2,025.00
By examination, obstetrics.....	310.00
By receipts from other sources....	4.00
Over draft in bank.....	98.87
To balance	
Fees returnable.....	125.00

\$3,908.66

Disbursements—

Unredeemed warrants	\$ 58.21
Members' expense	1,495.00
Clerical expense	797.45
Legal expense	872.05
Stationary, printing and phone Ex.	287.85
Incidental expenses	198.10
Returned fee	75.00
Returned fee, due, H. L. Giles....	50.00
Returned fee due, M. H. Brown....	50.00
Returned fee due, W. S. Keyting...	25.00

\$3,908.66

We now respectfully recommend the following for your earnest consideration:

We deem our present law, if properly enforced, entirely adequate for the protection of the public against ignorant and unscrupulous persons who practice medicine and surgery in defiance of law and order.

Difficulties of Enforcing the Law.

It is a fact well known to this Board that the state is being flooded by ignorant mountebanks, posing as benefactors to suffering mankind, and that criminal abortions are of frightfully common occurrence.

The Board, during the past two years, has concentrated its efforts towards prosecuting these charlatans and suppressing the criminal traffic above alluded to.

We have succeeded in convicting two of

the most notorious criminal abortionists in this state, who openly confessed to have performed hundreds of these criminal operations.

In order to revoke the licenses of these two criminals, the Board had to expend for legal help, as our report shows, \$872.

This money was paid out of funds received from applicants for medical licenses, leaving us with a deficit of \$223.87.

It is thus obvious that this Board is helpless to further prosecute offenders against the medical act on account of lack of funds.

We firmly believe that if sufficient funds were placed at the disposal of this Board to employ a qualified agent to systematically follow up these persons who persistently defy, disregard and violate the law, to the detriment of the people's health, we would soon be able to rid this state of these human parasites.

District and County Attorneys, and Other Officials.

This disinclination on the part of county and district attorneys, and other officials in the state to properly enforce the law, whether it be from pressure of business, or otherwise, has made it necessary for the Board to employ special counsel, in order to obtain conviction in the only two cases the Board has been enabled to press to a successful conclusion.

We desire to emphasize this one fact, that the operation of this Board in prosecuting persons, under the medical act of this commonwealth against those unqualified and unscrupulous persons who desire to practice medicine and surgery without proper qualifications as provided by law.

It must be said, in justice to those concerned, that the present county and district attorneys of Salt Lake, and their assistants, have shown their willingness to co-operate with the medical Board in its disagreeable task of dealing with the law defying pretenders, herein alluded to.

In view of the above stated facts the Medical Board, which has never yet received an appropriation of a single dollar, and whose members serve without compensation from the state, unanimously request an appropriation from the state of twenty-five hundred dollars (\$2,500), to cover the work of safeguarding the people against persistent defiers of the law for the next two years.

Nevada Medicine

Address all articles, personals, items of interest, and books for review, intended for Nevada Medicine, to the Editor, Geo. L. Servoss, M.D., Gardnerville, Nevada.

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Our prices on Reprints about cover actual cost. Those ordering Reprints must order at the time of revising their proofs.

We will give to contributors of original articles, or mail to addresses furnished by them, a generous number of copies of this journal free of charge. The names and addresses must be sent to the editor at the time of furnishing the manuscript.

Editor

GEORGE L. SERVOSS, M.D., Gardnerville, Nevada.

Associate Editors

B. F. Cunningham, M.D.....	Reno	Raymond St. Clair, M.D.....	Reno
M. A. Robison, M.D.....	Reno	Rein K. Hartzell, M. D.....	Reno
M. R. Walker, M.D.....	Reno	Donald Maclean, M.D.	Carson City
E. L. Williamson, M.D.....	Reno	F. C. Pache, M.D.....	Mina
		John N. Hurty, M.D.....	Indianapolis, Ind.

NEVADA STATE MEDICAL ASSOCIATION

M. A. ROBISON, SECRETARY-TREASURER
RENO

NEXT MEETING, RENO, NEVADA

December 14th, 1912.

Dear Doctor:—

Owing to a severe accident, immediately after our State Meeting, I have been unable to get my report to you sooner.

We had a good meeting and a good program.

Our new President, Dr. M. R. Walker, has appointed his Committees for the coming year, as you may see on the margin of this letter. It is the wish of the Officers of our Association that each member will willingly do his part toward making the coming year the best in our short career.

The Association of State Secretaries at the October meeting in Chicago, decided that the calendar year, shall be the fiscal year, and all dues are due January 1st, and County Secretary's who fail to remit dues to the Secretary by April 1st shall (all unpaid members) be dropped from membership.

This is Legislative year, and much is expected from our Committee on Public Policy and Legislation, but don't expect them to do it all, they will need the help of every member. Our Medical Laws need to be improved, and at this time, while the U. S. officials are rendering the profession much aid, is the best time for us to get in and work for our own good. It is the duty of each of you to report to the State Board, and District Attorney of your District, any irregular practitioners that you may know of, and see they are put out of business.

The California State Medical Journal was adopted as our Official Organ, and I hope to be able to communicate to you, through it, all the Association work for the coming year. In return for the service offered us, it is expected that each member will subscribe for the Journal \$1.00). County Secretaries will please collect and forward subscriptions to the publisher.

We will ask laws for sterilization of criminals, etc.; certificate of health before marriage license; against willful communication of venereal diseases, and to regulate the advertising and sale of Gonorrhea cures.

If you wish to know the Good of Medical Defense, read Kentucky Medical Journal, October 1st, 1912. They'll send you a copy if you ask.

That, and Contract Practice, will be up for final action at our next meeting.

It is the duty of our Councilors to look to the organization of new County Societies, and get new members for the old ones. Please get busy.

Note the new Committee on Revision of Constitution and By-Laws, and help them do the work.

If each of you will work as hard for the Association the coming year as many of you did this, before April first every reputable practitioner in the State will be with us.

Please don't forget to work for the 1915 American Medical Association meeting to be held in San Francisco. It will take work to get it.

Now, all together, please, for a better Nevada State Medical Association during 1913.

Fraternally yours,

MARTIN A. ROBISON, Secretary.

SPECIAL MEETING OF COUNCILORS

Is hereby called for Thursday, December 19th, 8 p. m., to devise ways and means to prevent the restoration of license to Dr. F. H. Wichman, and to prosecute illegal practitioners throughout the State.

Every member of the Medical profession is urged to be present. If you can't come, let me know before the meeting if you are with us, morally, mentally and financially.

Fraternally,

M. A. ROBISON, Secretary.

M. R. WALKER, President.

THE STATE SOCIETY.

Owing to an accident which befel Dr. M. A. Robison, secretary, shortly after the meeting of the State Society, and of which he has our sincerest sympathy, it was not until the 14th of December that we received any notes of the meeting. This report is printed in full elsewhere in this issue of Nevada Medicine, and we feel sure will be read with interest by all of the doctors of Nevada.

We are more than pleased to note that there was a good meeting, and one which listened to good papers, which we regret to say we missed because we could not get away from home just at the time of the meeting.

Good committees were appointed by Dr. M. R. Walker for the ensuing year, ones who will, we believe, do everything in their power to elevate the profession of the state.

The remarks, relative to medical legislation are good. The secretary is right in asking every member of the profession to give every assistance to the committee on legislation, in bringing about improvements which are necessary, if Nevada would rank with other states of the Union.

While we, of course, regret that our proposition to print the reports and transactions of the State Society was not accepted and that this work was given to another journal, the committee, no doubt, acted as they thought best. We believe that, in years to come, Nevada Medicine will have demonstrated the fact that she should, because she is a Nevada organ, be given the transactions. In passing, we would say that we do not believe that it is fair that the members of the Society should pay an additional dollar for the reports of the organization. The annual dues are \$3.00, and we believe that this sum, as is the case in other states, should cover the cost of transactions, and that each member of the society should receive such reports without paying an addi-

tional dollar therefor. Our proposition was to the effect that the Society should pay us \$1.00 from the membership dues, for which we would place the name of the paid up member on our mailing list for the year. This would have assured each of you a full report of the transactions of the Society, as should be the case, without additional expense, which would have been no more than right. We hope, in future years, that such will be the plan of operation, and that you who, for one reason or another, are unable to attend the meetings of the Society will receive this, at least, for money paid in dues.

It is extremely gratifying to our editor that his suggestions relative to laws, or rather suggested laws, regarding sterilization of criminal, etc.; certificate of health before marriage license; against wilful communication of venereal diseases, and to regulate the advertising and sale of gonorrhea cures, received the attention of the Society. The committee on legislation may be assured of our heartiest support in the furthering of introduction and passage of such laws during the coming session of the Nevada legislature. Incidentally, if such laws are placed upon the statutes of Nevada, her profession may likewise be assured that Nevada Medicine will give every assistance in their execution.

The remarks on Medical Defense, Contract Practice, the Duty of Councilors, Revision of Constitution and By-Laws and work in general for the association are well said and we should all put our shoulder to the wheel and even though we may lack numbers, make the Nevada association one of the best in the country. By all means bring the A. M. A. meeting to San Francisco in 1915, when we of the West will show those of the East what things we can do.

If there is a doctor in your community who is not already a member of the association, get busy at once and convince him that he is the loser thereby

and that the sooner he becomes such the better, in every way, for him. As Dr. Robison says, "Now, all together, please, for a bigger and better Nevada State Medical Association during 1913." We would add, keep up the good work indefinitely, not only for 1913, but 1914, 1915, 1916 and so on into eternity. Incidentally, see that your Councilors do their work and do it well, but help them in the doing thereof,—but **make them work.**

PROPOSED SOCIOLOGICAL LAWS.

At the late meeting of the Nevada State Medical Association, resolutions were adopted looking toward the passage of the following laws, by the State Legislature, now in session.

The first measure mentioned is that of sterilization of habitual criminals. This is a statute which is now in force in several states, having originated in Indiana several years ago. Dr. Hurty of the State Board of Health of that state, in writing the editor, said that such action not only warranted the adoption of the measure through doing away with the liability of birth of degenerates, but in addition improved both the health and morals of the persons operated. He believes that many habitual criminals will be raised to better class of manhood through this operation. Sterilization, while overcoming danger of child production, does not, in the least, interfere with other sexual functions, either of man or woman. In numerous instances large families of criminals have been traced to one single point of origin. In Indiana two persons were to blame for bringing into the world some four thousand people, a large percentage of whom, became habitual criminals. Other like examples of this sort have been reported. If known habitual criminals are sterilized it will act largely in not only doing away with crime, but degeneracy in general. It will serve to elevate the race. This meas-

ure should become a law and be rigidly enforced.

A law providing for health certificate before marriage license is issued, is another measure asked to be passed. When one stops to think that not less than eighty per cent of the women sent to hospitals for operation can trace their illness to innocent infection from their husbands, "who thought they were cured," the idea should meet with the approval of every man and woman in Nevada. Without examination, to determine whether or not either man or woman is afflicted with a venereal, or other communicable disease, a marriage of persons in ill health may follow. While the woman may not be infected with gonorrhea, a child may be born with infected eyes, with subsequent blindness, all of which can be obviated if it is a known fact that both father and mother are clean prior to marriage. If it is a known fact that the man is clean in every way, there will be no pus tubes or inflamed ovaries following marriage, and the women will not be consigned to hospitals to be unsexed, as has been the case year in and year out, time out of mind. While syphilis in the tertiary stage may not be communicable to the wife it is a self-evident fact that children born of syphilitic parents may be physical degenerates. Tubercular parents may not beget infected children, but their progeny may be weak and subject to disease rather than would be the case were the parents in good health. Such persons should not be allowed to marry. This measure should become a law, and at once. It has been tried out elsewhere, and with good results.

Making the willful communication of venereal diseases is asked to be made a misdemeanor. Today a husband may infect his wife with impunity and even refuse to pay the hospital and physician's charges for her care and treatment. In Nevada, where the denizen of the "red light" is given but passing attention, and where the sanitary sur-

roundings are not of the best, it is an evident fact that many venereal diseases are passed along with but little attention. Prostitutes never abandon their vocation because of the existence of either gonorrhea or syphilis, as long as it may be continued without great discomfort to themselves. In this way disease of this sort are passed from man to man and woman to woman and without any check, whatsoever. If a measure of this sort became a law a man becoming infected through communication with a prostitute could, upon making proper complaint, have such woman placed where she could not further carry the disease to others. While this might seem a hardship in so far as the woman may be concerned, it is clearly to be seen that such a law, properly executed, would cause women of the underworld to proceed with greater care. It would also tend very largely to the reduction of such diseases and thereby improve the public health. This is a measure which should become a law, by all means. It, with a law insisting upon health certificate before marriage, would undoubtedly do much to overcome the tendency of infection of innocent women.

A law asking for the control or regulation of the sale of gonorrhea cures is also asked. On the face of it, this looks peculiar. One wonders, at first thought, just why such a measure should be worthy of attention. Our druggist friends may object to such a measure, basing their objections upon the fact that it will serve to take a certain amount of trade from them. We anticipate that certain members of the legislative body will object to the measure for such reason, they considering that such a law would interfere with personal rights and privileges. On the other hand, what would such a measure accomplish? It is an accepted fact that, of practically all diseases, gonorrhea is one of the most unsatisfactory of treatment, even in the hands of the skillful physician, and even he is not

always absolutely sure that satisfactory termination has been reached. **While a "patent" gonorrhea remedy may put a stop to the discharge, as well as other symptoms of the disease, the person who treats himself with such agents is never absolutely sure that he is cured.** It is very probable that many men who have taken such cures (?) have not wholly recovered, and here again it is true that many innocent wives have been infected by their husbands, supposed to have long since been cured, but in whom the germs of the disease may have lain latent for months or years. Numerous cases of this sort have been reported, and are still given publicity from time to time in all of the journals and reports. It is obvious that this is a good measure, and should become a law. The fact that it might seemingly rob the druggist of a portion of his income is not overlooked. The facts of the case are, that the law does not allow him to prescribe and it is very probable that he would gain a larger percentage of profit from legitimate prescriptions than from such patent medicines. At least his conscience would not suffer from the idea that he had sold some agent which had not accomplished claimed cures.

Not one single one of the four measures mentioned above should be overlooked by our legislators, and to a man they should cast their votes in the affirmative when these bills come up for consideration. The committee to which such bills are consigned should look only into their constitutional features, in that they may be active and not subject to reversal by the courts. If the legislators will do this for the people of Nevada they will have carved their names in the hall of fame as men who believe in the conservation of health and the obliteration of crime.

In the event of the passage of such laws, and we can see no reason why they should not meet with such fate, those in charge of the public health of the state should see that they are exe-

cuted most thoroughly. No favor should be shown, for political, or other, reason, as their execution will mean a greater and better Nevada. The law regarding the communication of venereal diseases will do much toward the regulation of prostitution. If this trade must go on, it will undoubtedly be in a cleanly manner, as no woman of that vocation will care to spend her time in jail, or her money for fines, if either can be obviated and she will endeavor to keep herself clean, and when realizing that she is unclean, she will cease working until such time as she can show a clean bill of health. If possible, it will bring a better class of prostitutes within the state, as the lower classes would soon learn that they could not carry on their vocation and consequently would give Nevada a wide birth.

Every doctor within the state should at once write his assemblymen and senators and insist upon the passage of all four measures. A demand of this sort would command attention, such as will make it impossible for these men to overlook these bills.

AN OUTRAGE.

Recently, one of the most damnable outrages in the history of Nevada, was perpetrated by the State Board of Pardons in the act of pardoning one, Dr. F. H. Wichman.

After a career of moral degradation, in which he gave every evidence of lack of moral principles, of any sort, whatsoever, Wichman was finally brought before the bar of justice, accused of one of the most serious crimes against nature, as well as society, that of abortion. Added to this charge was one of manslaughter, based upon the death of the woman upon whom he operated. After a long and, to the state, expensive trial, Wichman was finally adjudged guilty of the crimes charged and sentenced to a term of eight or ten years in the penitentiary at Carson

City. Shortly after his incarceration he was called upon to treat a negro prisoner for some slight indisposition, and during this treatment Wichman branded, or is said to have branded the figure "13" upon the brow of his patient. For this he was said to have been thrown into solitary confinement. If this was true, and there is reason to believe that such is the case, it showed very conclusively that Wichman still remained a moral degenerate.

All of this has occurred within less than two years, and now the Honorable Board of Pardons has given this man his freedom, allowing him to go free and again become a menace to society.

In all probability Wichman will ask for a renewal of his license to practice his profession in Nevada, which license was taken from him at the time of the findings of guilt against him. It is true that Wichman has said that he has determined to behave himself, but there is no guarantee that such is the case, and his previous actions would lead us to think that the contrary will be the outcome. There is every indication that he is an habitual criminal, an educated one; one who, while he may, upon the surface lead an upright life, will undoubtedly go back to the underground world from which he came.

Should the State Board of Medical Examination see fit to relicense Wichman it will give the rest of the medical profession an idea that they may do any sort of practice they may see fit, and get off, practically scot free. Such an action would make Nevada a dumping ground for illegitimate practitioners of every sort and kind, and instead of a high grade profession, such as now exists in Nevada, we will soon harbor all sorts and varieties of quacks. Regardless of the action of the Board of Pardons, let the State Board of Examiners act in this matter in such a way that the profession at large, both in Nevada and elsewhere, may look upon

these gentlemen with pride, rather than scorn. We believe that these men will act in such a manner and that, through their action in not further allowing Wichman the privilege of practicing in Nevada, others of his class will realize that this is a poor commonwealth in which to carry on a nefarious practice.

The Councilors of the State Society will take up this matter and ask that a license be withheld, and in all probability their action will have considerable weight with the members of the Board of Examiners. There is every reason why Wichman should not be allowed to practice within the boundar-

ies of Nevada, and none why such privilege should be afforded him. We would ask that every doctor within the state, who believes in decent medicine and decent practice thereof, write the State Board of Examiners, insisting that Wichman's license not be restored.

If the board does restore such license, let every decent doctor in Nevada ask for the removal of the present board and for the appointment of one which will act to preserve the highest possible personnel of the profession of Nevada. **We do not need any such sort of practitioners within the state and let us show that we will not allow their remaining therein to carry on a practice.**

EUGENICS AND THEN?

Eugenics really means the higher breeding of the human race. This follows in the footsteps of the efforts of breeders to domestic animals. In so far as it goes, the idea is right, but does the human go sufficiently far? Does he, after obtaining a pure strain, keep that strain pure. Does he not allow more or less degeneration to take place after the birth of a pure child? It is apparent that such is the case in many instances.

The breeder of high grade live stock endeavors, through proper attention after birth, to keep his stock in the best possible condition. The owner of a high bred cow no more thinks of allowing such an animal to browse upon growing alfalfa, or other food which might interfere with its health, than he would give it a virulent poison. The animal has a market value and if it sickens, whether or not it may die, he knows that such illness may interfere with such value. A valuable animal is not allowed to run loose, with the possibility that it may become injured, thus lowering its value. In other words, the stock animal, of pure strain and

high grade, is guarded with tender care in every possible way. The animal has a dollars and cents value, and when money figures in any thing, that thing is given more than passing attention.

If a man is the owner of a high bred stallion he, as a rule, allows but a limited service to mares, thus keeping the male in the best possible condition. The same may be said of all other high bred males employed for breeding purposes, as it is a recognized fact that overworked animals soon show marks of degeneration, both in themselves and their progeny. The owner of high bred female animals, employed for breeding purposes, insists upon a clean bill of health in the male giving service, as he insists upon having offspring from his females which must be of the highest possible sort.

The practitioner of eugenics insists upon purity of the breeders of the human race. He insists upon both father and mother producing a health certificate before being allowed to marry, but as a rule such a certificate covers only those diseases known as venereal, others being either wholly or partially dis-

regarded. Such a certificate undoubtedly practically guarantees a pure strain in the child at birth, and is well, as far as it goes. But does such a certificate give any guarantee that the child will grow to man or womanhood without degeneration? Sentiment figures largely in the human family. The child has no money value since the abolishment of slavery, and cannot be bought and sold on the market. Of course, if such a child grows to full maturity, it may have some value, but this is not based upon anything definite, as it may, or may not, become a money maker. Because of the fact that sentiment, rather than money value, rules in the human race, we see many purely bred children allowed to degenerate during their growing years, or even after reaching maturity. Unlike the high bred calf, which is allowed only that which will make it a first class cow or bull, we see the child allowed to have what it desires, as to food and other things, regardless of the possible effect that such things may have upon it. If the calf becomes only slightly ill, it is given immediate attention and cared for tenderly. The child may become much sicker and still receive no more than passing attention. The calf is for sale; the child is not. The child, unlike the calf, is allowed to eat what it pleases, and when it pleases, without regard to the sort or quality of food. No attention is given to the choice of foods for the child, as is the case with the calf, and the former may be poorly nourished, both in mind and body, on this account.

Livestock is never, as a rule, neglected, while the child is, and that frequently. The calf, if it is desirable that it grow up strong and of good market value, is never allowed to run wild, while the child frequently is allowed a freedom which allows it to do things which either interfere with its growth, or its mentality.

The cow, nursing a calf, is invariably fed properly, while the human mother

may go practically hungry while her child is at the breast. This means degeneration, or the beginning of such process, and no matter how pure the strain of mother and father may have been, the child enters the inefficient class early in life. Here again do we see the ascendancy of dollars and cents over sentiment. If the child had a market value we would see both it and the mother given every possible attention.

The owner of a high bred dog expends much money for dog biscuit and other special foods, but if his child requires anything out of the ordinary, in the way of sustenance, it frequently occurs that objections are entered, because of the high cost of maintenance, and the child not infrequently degenerates physically because of this inattention. The dog is worth money, not so the child. The lady cuddles her lap dog, gives it perfumed baths, herself, not infrequently, but leaves the child to the nurse maid for every attention. She insists that the dog have every possible attention, but allows her boy to run wild upon the streets, and all this regardless of the fact that such inattention to an otherwise pure child, may be followed by marked degeneration.

Eugenics may be all right, as far as it goes, but does it go sufficiently far? We believe not. If we are to establish a high grade in the human race, we must not only see to the parentage of our children, but we must follow such a child through all the steps from birth to maturity, and see to it that it is properly reared. If we do not give the child the same attention as given blooded stock, there is little reason why we should give its reason for earthly appearance so much consideration. If we are to rear the highest possible grade of children, we must give them the same attention as we do our pedigreed dog, cow, horse, hog or other animal. We must see that the mother is well, and properly, fed, both prior to the birth, and thereafter. We must see that she has other attention which will

assure the production and raising of the best possible child. The child must be given as good attention as is afforded the calf, and as it grows, it must be treated as well as is the lap-dog.

Owners of high grade stock employ veterinarians to inspect their stock from time to time, in order that any slight irregularities may be corrected early, and such service frequently is costly. How many fathers of children will afford their progeny like attention? But few. The animal has a money value, while that of the child is only sentimental, and where the matter of money expenditure enters in the upbringing of the child a every noticeable economy (?) is given consideration. If the calf, or other animal, sickens, every effort is made to bring it back to proper health and the matter of paying out money for proper attention is not questioned. If the child becomes ill, and a trained nurse is asked for, as a rule we find serious objections raised, because of the cost. Just a matter of dollars and cents versus sentiment. The calf has a money value, which increases from time to time, while the child is practically without other than a sentimental value.

If we would raise the standard of man and womanhood we should not only insist upon purity of breed, but we should go a step farther, and insist that children be properly reared. The prevention of cruelty to children should be given as much attention as to animals. A child running wild, unkempt and uncared for, should be cause for the punishment of the parents, as he is being abused as much as is the overlaid and whipped horse. The father of the underfed child should be called to account, if we would elevate the race. In fact, we should insist upon proper care of all children, as much as we do that of all animals.

The child should be taught of his origin, properly, at an early age. He should be acquainted with the differences in sex by his parents, and in a

manner which will not be offensive, and not learn such things in the immoral way of the street. The girl should know that sooner or later certain changes will take place, thus bringing her into womanhood, and not allowed to go on and menstruate, as are many, without knowing a single thing of this function. She should know of the derivation of children at an early age. She should be taught to care for herself, sexually. If children are so taught, early in life, the many cases of degeneracy will have been wiped out, and in addition to the marriage of pure men and women, we will have done much to elevate the race. There is no more reason why the sexual organs should not be mentioned in the course of ordinary conversation than should any other portion of our anatomy. Were such the case they would soon cease to be considered matters of immodesty, and that false modesty, so common to everyone of us, would soon pass out of existence.

We who would practice eugenics should consider well every phase of the question. We should not only insist upon the purity of the parents, but should likewise insist upon everything which will guarantee the proper upbringing of the child. If we are lax in the "And Then—" our labors will have been largely for nothing. The question of proper rearing of the child is one of more than passing importance, and while we are passing laws, looking to purity of breed, we should likewise insist upon the enactment of those which will guarantee protection for the child subsequent to its birth. A well reared child, regardless of the general opinion to the contrary, will undoubtedly have a money value, if it reaches man or womanhood of the highest possible type. As Dr. Hurty says, "It will at least make more fertilizer" and fertilizer is worth money. So don't stop with a pure child at birth, but exercise the "And Then—" to the fullest extent, thereby increasing the worth of the race.

MISCELLANY

AND THERE YOU ARE.

The editor of the *Journal of the Indiana State Medical Association* (Dec. 15, 1912) says that the secretary of the Council on Pharmacy and Chemistry of the A. M. A. has checked up the October issues of the several state medical journals, and that out of a list of twenty-six journals owned by the state medical associations, there were only four which do not advertise proprietary preparations that have not passed the Council. It would seem that the high and holy homeopath has his hands full in trying to regulate the regulars.

For Sale.—Medical practice and drug stock in Snake River Valley, Wyoming. Three towns; only real drug stock; very little competition; collections good; will sell cheap. Must leave by March 1. Address, Dr. E. G. Condit, Baggs, Wyo.

Digipuratum (Knoll).—Digipuratum is of decided therapeutical interest, since a consideration of its composition shows that for one thing the undesirable principles of the plant are eliminated, and for another the principles of known activity are retained. It is described as containing the active gluco-tannoids (glucosides) of digitalis diluted with sugar of milk, so that the physiological action of 1 Gm. corresponds to 80 frogs units. (1 tablet equals 0, 1 Gm. or 8 frog units.) Its uniform therapeutic potency is said to be well maintained. The preparation is physiologically standardized. The increasing employment of digitalis to support the mechanism of the heart renders this standardized preparation of value, and the success that has attended the separation of substances which in ordinary digitalis preparations cause gastric disturbances adds to this value.—(*The Lancet*, June 8, 1912.)

Manufacturing agents: Knoll & Co., 45 John street, New York.

A Systemic Boost.—It is safe to say that the average physician is called upon to prescribe a tonic more frequently than any one other form of medication, unless it be a cathartic. Patients who are patients solely because they are tired, "run down" and generally debilitated, are constant visitors at the physician's office. Such individuals need something that will boost them up to their normal point of resistance and then hold them there; in other words, not a mere temporary stimulation, with secondary depression, but a permanent help to the revitalization of the blood and a general reconstruction. Pepto-Mangan (Gude) is not only prompt in action as an encourager of appetite and better spirits, but is also distinctly efficient as a blood builder and systemic reconstituent. It is pleasant, non-irritant, free from constipating effect and does not stain the teeth. It is thus a

general constitutional tonic of positive service in all conditions of general devitalization.

Raising the Index of Resistance in Infections.—For the purpose of restoring vigor to an organism weakened through pneumonia or a long continuing bronchitis and thus rendered easily susceptible to a tubercular infection, Cord. Ext. Ol. Morrhuæ Comp. (Hagee) possesses value of an easily demonstrated character.

In the preparation of Cord. Ext. Ol. Morrhuæ Comp. (Hagee), a process is employed which, while freeing the product from the obnoxious qualities of cod liver oil, retains the elements upon which the therapeutic and food value of the oil depends. This is a point which should be borne in mind in choosing a cod liver oil preparation for patients whose digestive organs are easily deranged.

Of course, while it is in bronchial and pulmonary diseases that Cord. Ext. Ol. Morrhuæ Comp. (Hagee) has its greatest field of usefulness, yet its use should not be limited to these diseases alone, for its power as a tissue food insures results from its employment in all conditions marked by decline of strength.

The Value of an Effective Alternative in Neurasthenia.—Nine-tenths of the cases of neurasthenia which present themselves are due to a blocking of the system with products of malassimilation. It is not so much a tonic and stimulant regime that these cases demand, although that is useful later on, as a course of treatment designed to wake up their lazy emunctories. Bowels, kidneys, liver, sweat glands, all require stimulation and Iodia is par excellence the remedy to produce this result. This sort of treatment will produce a feeling of exhilaration and renewed vigor in the patient more quickly than any regime based on strychnine or overfeeding.

Satisfaction Too Great to Express in Moderate Terms.—It is conceded by all who have ever used the "Storm Binder" that it has no peer. The average physician who has tried with indifferent success one supporter after another with the usual objections and complaints feels a degree of satisfaction rather difficult to express in moderate terms when his patients, with one accord, rise up and call the Storm Binder blessed, and assert they could not live without it. The fame of this "supporter which supports" has extended from coast to coast, and foreign orders are becoming greater each month. This *Journal* particularly rejoices in Dr. Katherine Storm's great success, inasmuch as she is a well-known woman physician and a graduate of the Woman's Medical College of Pennsylvania.—(*The Woman's Medical Journal*, Nov., 1912.)

New Biological Laboratory.—The handsome building we are illustrating has recently been added to the group of biological laboratories of H. K. Mulford Company at Glenolden, Pa.

The building is constructed entirely from basement to roof of hollow tile and concrete, making it a fireproof structure throughout.

It is divided into departments, each department being a unit, and complete in itself. The east end of the building is devoted to the handling of serum and globulin products. On the first floor bleedings are received from the bleeding room, serum or plasma is removed from the clot or from the corpuscles, as the case may be, and the product stored immediately in cold storage rooms belonging to this group.

When the serum or globulin has been tested and is ready to be finished, it is delivered to the group of antitoxin and serum filling rooms. The bulk stock is kept in cold storage rooms connected with this group. Immediately adjoining the twenty filling rooms is the labeling and packing room for serum and globulin products. This group also has its own cold storage rooms. Elevators at each end of the building convey the completed packages to the shipping rooms. After inspection and checking off against a duplicate set of records shipments are made.

On each floor glass partitions between the halls and rooms permit the demonstration of the work to visitors without their entering the rooms themselves.

The laboratory floors are of asbestolith. The advantage of this material is that there are no seams or cracks and is impervious to fluids. It partakes more of the nature of wood than of cement, and because of a cushiony layer beneath the surface crust, is more acceptable to employees than cement floors.

On the lower floor are the stock rooms. The sterilizing rooms are in a separate building well supplied with ventilating skylights.

On the third floor are found the lecture room, library and museum.

The entire plant is arranged and managed under the unit system. A separate building or group of buildings, or in some cases portions of larger buildings, are devoted to the preparation, standardization, packing and shipping of each product. Each unit is in charge of scientific experts in their particular branch of bacteriology. Cold storage rooms supplied with cold air from a central refrigeration plant form part of each individual unit arrangement. This makes it possible to keep on hand a large stock of biologicals without danger of deterioration, so that the company is prepared at all times to supply these products and to cope with the enormous demands often created by epidemics of the various infectious diseases.

The Bowel Toilet in Winter.—In winter, fully as much as in summer, the physician should watch the condition of the intestinal canal. With the constant changes of temperature, which are likely to occur at this time in going from heated rooms out of doors, or during the exposures to drafts which are constantly occurring, these alternate chillings of the skin and congestions of the internal organs help to produce colds, sore throat, bronchitis, pneumonia, and all the other diseases which prevail during the winter months.

To prevent these diseases, as well as in curing them, the first essential is to "keep the bowels open." A quickly acting laxative will often cure, and will always alleviate a cold if given promptly. For this purpose there is nothing superior to Abbott's Saline Laxative. It acts quickly, pleasantly and thoroughly. It helps restore the circulatory equilibrium, withdrawing the blood from the congested respiratory organs. By cleaning out the intestinal waste, it removes the poisons contributing so much to the etiology of all diseases—the intestinal poisons. And so, associated with the W-A Intestinal antiseptics, it should make an essential part in the treatment of all acute ailments.

Doctor, try Abbott's Saline Laxative. Use it in winter and in summer—all the year through. Salithia is successfully used in rheumatic conditions.

Digitalis Efficiency **Digalen**

**A good thing to remember
when treating pneumonia.
Sample on request.**

*The Hoffman-LaRoche Chemical Works
440 Washington Street, New York*

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THE ENACTMENT OF SANITARY LAWS AS A MEANS TO HEALTH*.

C. E. TENNANT, M.D.,
Denver, Colo.

Ladies and Gentlemen:

I am pleased to have the opportunity of presenting in this attractive city of yours, some of the important problems, which, as citizens of this great United States, confront us all. While it may be unnecessary to consume your valuable time by the presentation of some of these thoughts, it may be possible to enlist your support in the great efforts which are being put forth today for the eradication of certain of our preventable diseases.

If other municipalities had patterned after Salt Lake's broad gauge methods, I am sure there would have been much less need for advocating such measures as are here to be discussed tonight.

You are certainly to be congratulated on these broad streets, every one of which would be a boulevard in any of the great cities of our land, and it is only within the past few years that other municipalities have come to realize the value of boulevards, and are now vieing with one another to procure these desirable improvements at an enormous increase in cost. It is a pity that they had not the foresight of the Salt Lake fathers.

We pride ourselves on our modern sanitary methods and yet recent excavations have disclosed the fact that sanitary measures quite equal to our own modern ideas were present in the days of the Cretans. There, 3,500 years ago, were constructed terra cotta drain pipes which emptied into large mains, and these large mains had man-holes for inspection and flushing.

Even the dress of these people,

though very simple, was somewhat similar to our own. The ladies wore elaborate and sometimes tight-fitting bodices cut low in the neck, with skirts sometimes flounced or embroidered, and their homes were far more modern than those of the Greeks of the later classical period. Life was lived in the open, and often their theaters and their places of assemblage were without roofs, as are some of our more recent amphitheaters. Yet, with all this marvelous development, 1,500 years before Christ, the time has not been so far distant when nations lived again their primeval lives, because the science and arts of the Cretans had been absolutely wiped from the face of the earth.

History has repeated itself time and again, and the energy of the nations of the past has been applied to the building of magnificent temples, structures of art, and the development of races, only to again be reduced to crumbling masses of ruins, lost arts and vague histories.

What has been the reason for all this? What the ferment which is forever dealing death and destruction? It has been due to the very same element which today harasses all efforts of progress, human uplift and development, and which is the incentive for the opposition to securing the millenium of well-being or health: It is the hydra-headed monster, greed, and it is responsible for the three great curses in our world's history: War, Pestilence and Famine.

Were it not for these three ravaging elements, the ancient races would not be a matter of history today, nor the one-time beautiful temples, ruins which

*Address prepared for a popular meeting at Salt Lake City, January 23, 1912.

now stand as mute evidences of former happiness and prosperity.

This same monster, GREED, is today the prime factor in opposing modern methods for stamping out disease, because it has assumed that the recognition of certain contagious diseases, such as plague or smallpox, would drive trade from the infested district, if the fact became known,—or that measures introduced to control disease are in constraint of individual liberty, or that because certain of the noted patent nostrum vendors or other allied trades, would suffer loss of business, if the health of a community were improved.

In this age of so-called race suicide, it would seem as though it were time to pause and survey the willful and needless suffering and loss of life, which seems but a trivial thing to some, but also because of the disability to the individual; and the loss to the community of the services of able-bodied people, which, if estimated from a commercial standpoint would, in this country alone, amount to many millions of dollars each year.

This is not the only feature in this willful waste, for the loss which each of us may be obliged to suffer in our own families, can never be measured by the universal commercial standard, dollars and cents. Yet how indifferent the world seems to this last fact. Death seems to be but a passing incident until it comes directly home to them, and then there is an awakening to the fact that something should be done to spare the rest of the family. It is at these times that one realizes "he is his brother's keeper," and that at least mild submission to proper laws and measures, adopted for the eradication of disease, might possibly be for the greatest good to all, notwithstanding the fact that there may be a measure of restriction to the personal liberty of the individual.

A noted decision of the Supreme Court of the United States, rendered

April 11th, 1905, will be of interest in this connection. This decision upheld the compulsory vaccination law of Massachusetts, and with reference to the rights which certain people believe are infringed upon by these measures; it states: "The liberty secured by the Constitution of the United States does not impart an absolute right in each person to be, at all time and in all circumstances, wholly freed from restraint. Real liberty for all could not exist under the operation of a principle which recognizes the right to use his own, whether in respect to his person or his property, regardless of the injury that may be done to others."

If everyone would take this decision and fit it to his own and his neighbors' requirements, there would be little need for sacrifice on the part of the few for the many.

If science had not shown that many of our diseases are due to definite germs, and that these germs are transmitted from the sick to the well, either directly or by other agents or hosts, there would be little need for certain of the disagreeable personal restraints, such as quarantine, fumigation or other restrictions. But these facts are beyond question, and that we have disease-carriers no one can deny, hence, the need for public laws, which will secure the greatest good to the greatest number.

We all recognize the necessity for, and give our support to police laws for the control of murder, violence and fire, yet how slow are we to adopt laws, and at times stringent measures, to protect our loved ones from the needless suffering and death by preventable disease. Are we consistent? Are we acting in good faith with those who have been entrusted to our care, and are dependent upon us?

When members of the medical profession plead for the protection of the lives of the community against these communicable diseases, or urge meas-

ures of control by the enactment of laws, immediately a cry is raised by the selfish individual (who rebels at the infliction of some necessary but slight personal restraint) that the medical fraternity is devising means of advertising, or that it is seeking to control the personal liberty of our citizens. Could there be anything more effective in legislating the doctor out of business, than the enactment and enforcement of laws which would stamp out the contagious and preventable diseases? And yet, where do you find the doctor? Is it on the dollar and cent side of the question, or with suffering humanity? And where do you find the patent medicine fakir and his allies? It is easy to explain the position of the latter, for is it not GREED or commercialism, or business, as you may call it, which impels him to take this stand, regardless of the fact that it is at the expense of human life?

Now, what about these disease-carriers; is this all talk, or have we had practical demonstrations of the control and eradication of outbreaks and epidemics of these contagious diseases?

As an example, one of the first of these disease-carriers to be discovered and successfully controlled, was the mosquito. There are two species of the mosquito which concern us tonight, one of which carries yellow fever in its bite, the other malaria, two of the most virulent of the modern diseases. Before the truth was successfully wrung from the mosquito, several members of the medical profession in our own government Army Medical Department, paid the sacrifice with their lives.

Recent history in our own Southland and Cuba, bears witness to the release of humanity from the unrelenting scourge that has literally demanded millions of human lives as its toll. Yet in the face of all these facts, the trifling cost of oil and drainage, which effectually destroys the mosquito, is too often considered by a community as

against this frightful malady, and why? Because of mercenary commercialism or GREED which sails under the false cloak of economy. Yet this same community will spend ten times the amount on legal processes to defend its criminals, or promote the interests of some political aspirant or corporation.

Again, a splendid example of what may be accomplished by concerted action of the people in the prevention and the eradication of disease common in the tropics, is now to be seen in the Panama Canal zone. Were it not for the careful work of the Army Medical Corps, and the Public Health and Marine Hospital Service of our government, the Panama Canal would never have been a reality.

The French failed in this undertaking, not because of the lack of funds or equipment, nor because of poor engineering, but for the lack of an efficient and loyal medical corps and modern methods of sanitation. During the French occupation, the mortality of foreigners working the zone frequently amounted to 70 per 1,000, and the suffering and loss of life were so great, that it finally became impossible to procure workmen who would dare to undertake the task with so poor a chance of ever returning home alive.

Before our own government undertook the enormous task of separating the two continents, the Army Medical and Marine Hospital Corps were sent into the zone to clean it up. As a result of their work, there are few places on the face of the globe where it is more safe to live, than is this same one-time pestilence ridden Panama; but this condition is possible, only so long as this zone is under our government medical control.

At the present time the mortality in the canal zone proper, is less than it is here in the United States. Our mortality runs anywhere from 13 to 20 per 1,000, and in the canal zone the highest mortality in recent years has

been 10 per 1,000, and this, too, including all deaths occurring from injury as well. And why is this so? For the simple reason that politics, GREED, special privilege and pestilence are treated alike; the Medical Corps knows no difference in its rulings.

Conditions are quite different, however, in the two cities of the zone, Panama and Colon; here the Marine Hospital Corps is subservient to the municipal authority, and as a result, the mortality is double that occurring in the canal zone, and would be far greater, were it not for the watchfulness of our Marine Hospital Corps, which constantly and effectually quarantines against all fever-infected ports. Paradoxical as it may seem, yellow fever and malaria are practically unknown in their former Panama abode, but remove for one month our vigilant Medical Corps, and Panama would soon again be the same old pest hole of former years.

Two diseases having a very high mortality are common to our immediate vicinity. These are bubonic plague and Rocky Mountain spotted fever, the former being spread by rats and ground squirrels to fleas, and then to man; the latter by the intermediate host, the wood tick. These have for the present, in all probability, been placed under control, if not eradicated, and credit for this work must be given to members of Marine Hospital Corps.

When the plague was raging in San Francisco, their commercial bodies placed considerable obstruction in the way of the Marine Hospital Corps, and its efforts to stamp out this dread disease, and why? Because of this same motive, GREED; or in other words, shortsighted commercial interests.

As Assistant Surgeon General Rucker of the Marine Hospital Corps says: "The way to ruin the commerce of a bubonic plague-infested city, is to try to hide the fact of its presence in that city."

The disease which should concern the citizens of Utah is this same Rocky Mountain spotted fever. The death rate from this disease is from 5% to 90% and you need an ever watchful vigilance committee to keep it under control.

As passed Assistant Surgeon Amesse, of the Marine Hospital Corps, says:

The loathesome disease, smallpox, the *pesta magna* of the Roman period, the blight of nations of the past, can be traced back many centuries before Christ; always and everywhere adding to the burden of human misery. Smallpox was then spread by war, by the great crusade, by religious pilgrimages and by commercial caravans. It exacted from 40% to 70% mortality of the primitive races, and 10% of all deaths in England in the eighteenth century were due to smallpox.

But we have little fear of this dread disease today, because, fortunately, there has been a widespread custom in recent years of compulsory vaccination, which has largely stamped out the disease.

France, in 1874, enacted a compulsory vaccination law, providing for the vaccination of every child in its first year, and all school children in the twelfth year, and as a result of this practice, smallpox in recent years is practically unknown, except from imported cases; the entire German empire in one year, recently suffered but twenty-eight cases of smallpox, and these were chiefly imported ones. How different is this record from the conditions in your own state. Recent comparative figures compiled from the government reports at Washington, give the following statistics:

Alabama, with a population of 2,214,050 had, during the year 1910, 650 cases of smallpox, with one death; California, with a population of 1,648,049 had, during the year 1910, 152 cases of smallpox and no deaths. During the year 1911, it had 105 cases of

smallpox with two deaths, or a total of 257 cases in two years, with two deaths.

New York with a population of 8,000,000 and a seaport State, had during the years 1910-1911, 561 cases of smallpox with ten deaths.

Pennsylvania with a population of nearly 7,000,000 had, during the years 1910-1911, 263 cases of smallpox, with no deaths, and Utah, with a population of but 316,331 had, during the year 1910, 819 cases, with two deaths, and during 1911 you had 1650 cases with seven deaths, making a total of 2469 cases for two years, with nine deaths or 800 more cases, than had the combined states of Alabama, California, New York and Pennsylvania, with their aggregate population of over 18,000,000 people as against Utah's population, 316,000.

Is there not something radically wrong with your Health Laws, or is it that your legislature is under the spell of the combined GREED interests? On the 13th day of March, 1912, Denver, a city of 213,000, had two cases of smallpox, one of which came from Utah, while Salt Lake City, with a population of 92,777, had eighty cases.

To those present in this audience who are opposed to compulsory vaccination, I wish to cite just two of many as an instance of the effectiveness of vaccination: A party of ladies and gentlemen numbering thirty in all, left your city for Mexico, where smallpox prevailed; they were advised to submit to vaccination; only two refused, these having been utterly opposed to the procedure for many years. After a short sojourn in Mexico, this couple were stricken with smallpox and died; none of the remaining twenty-eight contracted the disease.

In May, 1902, a transport left Manila for San Francisco via Japan, with two full regiments of infantry, 200 cabin passengers and 150 members of the crew, in all, about 2,750 persons. Orders were received to vaccinate all

soldiers and civilians, leaving it optional with officers; this order was in view of a wide-spread invasion of smallpox in Japan. The troops, the crew and all cabin passengers except one officer, Lieut. C. ———, submitted to the vaccination; arriving at Nagasaki, the entire personnel went ashore mingling freely with the natives. Nine days after leaving Nagasaki, Lieut. C. ——— developed smallpox, and died ten days later in Honolulu; no other cases occurred on this ship.

In recent years there has been a general crusade against the house fly, but it has taken many years and many lives to learn the true character of this filth-breeding little human destroyer. Some of its disease-producing work was first discovered during the massing of troops on our Southeast border, during the Cuban invasion; here typhoid fever raged to a frightful degree, and in searching for the cause, it was found that during the mess hours, the soldiers' tables and food were covered with flies whose feet were white from lime fresh from the satrines, the contents of which had been sprinkled with lime. Flies are born in stable droppings and decaying garbage, and ever after are bathed in filth, their legs fairly teeming with germs of all descriptions. Is it any wonder that the disease is spread broadcast, when flies are permitted to visit the sick room and then alight on your food?

Typhoid fever and tuberculosis are the two diseases most quickly carried by the house fly. Typhoid fever is a filth disease, absolutely preventable, and a disgrace to any community in which it becomes epidemic. Its occurrence means that some one has violated the sanitary law or Public Trust, and that innocent parties should be exposed to its ravages is a public outrage. Where good sanitary laws exist and are enforced, there is little chance for typhoid fever.

In the Panama Canal zone, every house is screened from flies and mosquitoes,

and every person taken sick is at once quarantined. No stagnant water is permitted anywhere, and pools which cannot be drained are covered with oil, while rank vegetation about the shores of pools and streams is burned. All food coming into the zone is inspected, no special privileges being granted to anyone, be he capitalist or manufacturer. The water supplies for drinking purposes are patrolled reservations upon which the foot of no man may tread. In this way it has been made possible for this pest-ridden zone to become one of the healthiest spots on the earth.

Another very important feature in the protection of the public health, is the assurance of clean, wholesome food. It was but a few years ago when fraud and misrepresentation ran riot in the production, manufacture and distribution of food stuffs in this country. Foods were anything but what they seemed; spices were anything from ground hulls to sawdust or clay; ginger, previously exhausted by beer manufacturers was sold as genuine; ground coffee was adulterated with colored sawdust or earth; egg powders for bakers' use consisted of colored clabber which had been dried and ground; butter was made from all forms of renovated grease, and sold as dairy or creamery butter; while sausage was made up practically of cereals and water; in fact, the practice of misbranding became so common that few manufacturers there were but yielded to the temptation. No sooner had the Pure Food and Drug Act become a law, than all interests which had striven for the passage of this law, the medical profession included, became targets for the most venomous and vilifying onslaughts possible. Words cannot express the abuse which was heaped upon Dr. Wiley and his supporters for securing the passage of this law, and persistent efforts and unlimited funds have been annually subscribed by these

traffickers in human life, to supplant Dr. Wiley, and the organizations and influences that are striving for the enforcement of this law.

While they have so far failed in securing the repeal of this law, they have succeeded in distorting it, and diverting its influence for good. And finally the adulterators, the patent medicine and medical fake interests and their unholy alliance, THE LEAGUE FOR MEDICAL FREEDOM, have finally forced the resignation of that noble champion of the peoples' rights, Dr. Harvey W. Wiley, from his position, and now the burden will rest upon us, THE CONSUMERS, to look out for our own interests.

The enforcement of this Pure Food Law, unfortunately fell to the Department of Agriculture, and the head of this Department has repeatedly shown his friendliness to the enemies of this Pure Food Law, and his recent decision and charges which were brought against Dr. Wiley, and President Taft's disapproval of same, are matters of recent history. Not until Congress shall have succeeded in enacting a law which will create a Department of Health into which all these various Health Departments may be transferred, will we succeed in securing a fair and just enforcement of the Pure Food and Drug Act, and the real protection of the nation's interests. This has been accomplished in Cuba, Panama and the Philippines, and why not in our own country?

The "Owen Bill" had for its purpose, the segregation of the various Bureaus of Health, to be known as a "Department of Health" with representation in the Cabinet. There would then be transferred to this Department, the Public Health and Marine Hospital Service from the Treasury Department, the Bureau of Chemistry (Dr. Wiley's Department of Pure Food and Drugs) from the Department of Agriculture, and the Di-

vision of Vital Statistics of the Bureau of Census, from the Department of Commerce and Labor. Had this Bill has been enacted into a law, the protection of the public through proper health measures would have been greatly facilitated, for the purpose of this Bill was defined, "To foster and promote all matters pertaining to the conservation and improvement of the public health, and to collect and disseminate information relating thereto." Provisos carefully safeguarded the rights of the states, of private citizens, and of all practitioners of healing.

Is it any wonder then, that the leading opponents of this Bill were those who originally organized the League for Medical Freedom, and of necessity were its first officers, and at the same time, the largest patent medicine vendors in the country? With them are associated the fraudulent food manufacturers and their interests, whose business will be destroyed by the successful passage of such a Bill, and the effective enforcement of the Pure Food Law. Pity 'tis, that there are other good law-abiding citizens who have been misled into believing that they are fighting for personal liberty—when they are in reality, a cat's paw being used to pull the chestnuts out of the fire. Such history has repeated itself ever since the world began, and probably no philanthropic movement ever had its inception but that it met with the opposition of GREED, clothed in human form, and if this GREED does not succeed in smothering the Owen Bill in its birth, it may clip its wings by other means such as were probably used in trimming the Pure Food and Drug Act. This was accomplished by little so-called jokers, harmless inserts injected into the measure by some paid assassin—a trusted representative of the people—for the Bill in its present state is insufficient in that it fails to prevent certain dishonest individuals from practicing deceit

upon the people, for, if you will remember, the recent decision of our United States Supreme Court was to the effect, that while an individual must not misbrand his wares—he may misrepresent and lie about their virtues as often and voluminously as he cares to—and because of this miscarriage of the law, President Taft has recommended that such amendments be made as will cover this abuse of the public trust.

In the early days when the mind was new, certain rules were made to govern communal trade. These rules gradually crystalized into the English law which has been handed down through centuries, and finally adopted as a standard in the present day life. These now form technicalities which hamper the usefulness of our present health rules and laws. A premium has been placed on rascality, it being possible for one to use commercial channels for wilful misrepresentation. At the same time the public is warned by these courts to BEWARE of these misrepresentations.

Is it not time for this public to exercise its franchise in the control of GREED by a thorough campaign of education, co-operation, and the amending of our present Pure Food Law. I repeat, this is only possible by the successful passage of a Bill for a Department of Health.

Now just a few words about your local State affairs: I am advised that the State appropriation for your Board of Health, is \$11,125.00, while \$38,900.00 has been appropriated for the protection of your game and fish.

How fortunate the game and fish are in your State, for they have \$3.00 spent for their comfort to every dollar spent for the protection of the health and life of your loved ones; interesting, is it not?

What are you going to do about it?

Some little encouragement is to be found on the other hand, in the gen-

erosity and interest your municipal authorities have shown in the welfare of your citizens. It is with pleasure I note your annual appropriations here in the City amount to \$56,803.00; not enough, for it cramps the efficiency of the Department; but it is a good start made in the right direction, and should be quickly doubled. When you can afford to spend \$128,000 for the protection of your City against vandalism, you should afford to spend an equal amount for the protection of your people from disease. It saves doctors and hospital bills, and consequently comes back to you.

At the present time the mortality of children under five years of age in the United States is 30%, or, in other words, one out of every three children born, dies before it is five years of age.

One of the common sources of this frightful death rate is the municipal milk supply, and all over this broad land efforts are being made to clean up the local dairies; have you done so?

Denver had its crusade some three years ago, and to-day has one of the

best Milk Ordinances and Sanitary Dairy Officers in the country. As a result, our infant mortality has been lowered markedly.

IS IT WORTH WHILE? Shall we support our sanitarium, shall we urge upon our legislative bodies the enactment of such health laws as shall protect our own and our neighbor's families? Have we a right to insist upon this protection? I leave the answer to you.

From the commercial standpoint, the doctor would be infinitely better off, if he ceased his efforts in your behalf, and he would also be spared the anathemas hurled at him from the interests whose business (trafficking in human life) has been ruined by this health crusade; but, as in the great battles of the world's history, where you find the fighting thickest, there you find the soldier fearless; so in this battle for the safety and comfort of the human race, there you will find the true physician against ALL ODDS, fighting always with his face to the great monsters, "GREED and PESTILENCE."

THE EYES, EARS, NOSES AND THROATS OF SCHOOL CHILDREN.

FRANK ALLPORT, M.D.,
Chicago, Ill.

When asked to speak to this audience I accepted the honor with alacrity because I believe that the more medical, surgical and hygienic subjects are freely, intelligently and plainly discussed between the medical profession and the laity, both in occasional conversation, the public press and the lecture platform, the sooner will the world bid farewell to quack doctors and seductive medical vagaries. It is inspiring to witness the faithful, heroic labors of the medical profession in their efforts to investigate disease, its course, prevention and cure, and to observe

their application of such knowledge in the alleviation of the sufferings of mankind. It is likewise almost pathetic to observe that, notwithstanding such faithful and scientific labors that often go almost unrequited, except in the knowledge of good work properly performed, notwithstanding the great and successful surgical operations that are nowadays undertaken, notwithstanding the great advances that are being made in diagnosis, bacteriology, exact serum therapy, etc., etc., many otherwise intelligent people virtually scoff at real medical progress, and

*An Address before a Chicago Woman's Club.

blindly and fatuitously champion and pursue the senseless, superstitious and evanescent medical hallucinations of the hour. It is for such reasons that I am glad to lend my small influence for intelligent medical uplift, and to discuss before you a subject which is of great interest to me, and I hope will be to you, viz: "The Responsibility of the School to the Child," and as it is quite impossible in one short evening to cover the entire field of such responsibility, I will ask your attention to one portion of it only, and will discuss defective eyes and ears in school children, the effects of such defects on the health, education and character of the child, and what school and health authorities can do to easily right an evident wrong, which is more or less debarring children from their proper participation in suitable educational advantages, to which we must largely look for improved sociological conditions.

So much has been written and spoken on this subject that a literature of its own has developed, and it is quite impossible to say more without indulging in much repetition and recapitulation. I feel especially apologetic in this regard, as I have for years appeared almost constantly in print and on this topic, and feel that I have but little to say, except to urge activity on the part of physicians, educators and legislators, that the good work already begun may be promptly finished. Nevertheless, I have been invited to address this audience, and the honor so courteously extended, has found me in a ready responsiveness, for I never can and, I fear, never will have strength to resist a call to talk upon my favorite theme. Therefore, ladies and gentlemen, I present myself before you prepared as of yore to again do battle for the eyes and ears of the coming generation, realizing fully that I have nothing new to offer, but believing that, like some good old books and

music, repetition can do no harm, and feeling that the last word will not be said upon this subject until every boy and every girl in the civilized world shall have had the enormous benefit of annual physical examinations and proper medical supervision, which shall fit them as far as may be for the work of acquiring an education without physical disintegration.

The public schools are a public trust, through whose portals all parents should confidently and confidingly lead their offspring, feeling that when the care of these young lives are transferred to the supervision of the school authorities they are safe from harm, and will at least be handed back to them in as good condition as they were at first. That good and creditable work along these lines has been and is being accomplished is unquestionably true, and conditions are unmeasurably better than they were ten years ago, but much work remains to be done, and until the annual and proper physical examination of all school children shall have been accomplished, those having the interests of the coming generations at heart should press on, battling for the right, until victory is perched upon their banners.

It should never be forgotten that there are in the United States alone to-day almost 20,000,000 children; that about 8,000,000 of such children suffer from some ear, nose or throat disease which impedes their school progress; that about 8,000,000 more suffer from some eye defect which has the same detrimental effect upon their school progress; and that a vast majority of such abnormal conditions can be either cured or materially alleviated by early medical interference, and will become chronic or incurable if neglected. Think of it, there are in this country about 16,000,000 or 80 per cent. of school children suffering from some eye, ear, nose or throat disease which can easily be detected and generally

cured, if the public health and educational authorities will only decree that this work shall be done. Is it hard to do? No. Is it expensive? No. Is it in any way objectionable? No. Can it be easily and effectively accomplished? Yes. Then why is it not done?

My imagination is not always active, and for this defect I humbly beg my hearers' pardon, but to the best of my knowledge and belief the reason for the non-accomplishment of this plain duty on the part of hygienists, educators and legislators, is simply apathy, neglect, or politics. Can such authorities not rise from the level of the past to the heights of the present and of the future, and offer this tardy reparation to the poor neglected children of this country, who must some day control its destinies? I believe that they can, and that some day they will, and that the next few years will disclose the full fruition of the devoted labors of the past.

It may be of interest to know the financial aspect of the situation, as this phase of a problem will often exert a potent influence where all others fail, and the fact that the people of the United States have about \$70,000,000 invested in public schools may add a dignity to the situation and stimulate a desire to have the visible representation of this immense amount of money managed in the best possible manner, which is quite impossible unless the school children of this country are in good physical condition.

It may also interest students of sociology to know that there are in the United States over 300,000 blind people, many of whom would not have become blind if their disabilities had been detected during school life, and that it costs the public in the neighborhood of \$15,000,000 to care for these unfortunates. Reducing the question then to the more sordid standard of money, is it a matter of public economy to neglect the eyes of school children?

We should remember also that over 50,000 American children are annually removed from school on account of debilitated physical and nervous conditions brought on by physical incapacity and injudicious mental pressure. Such children, being unable to acquire a suitable education, fall by the wayside, grow up in invalidism and ignorance, and help to fill the ranks of the weaklings, the worthless and the criminals. No flight of fancy is required to transform the defective child into the non-supporting "ne'er do well," wandering and menacing tramp or idle pleasure seeking and misery finding prostitute. The evolution is natural and consequential, and stands as an enduring monument to the benignity of education. A child whose educational progress is embarrassed, or almost stopped, by reason of physical defects may soon acquire a loathing for education and all that education represents, and the seeds of idleness and irresponsibility thus being sown, may, unless energetically and tactfully controlled, either by parental or surrounding influences, fructify and produce a personality ripe for sinister inoculation. If, therefore, society or the state can eliminate, control or mitigate the existence of such physical defects in children in a position of reasonable equality with their healthy companions, thus affording them fair opportunities for educational progress, their duties become unmistakably clear, and the investment of public funds for the consummation of such designs a laudable measure of unquestionable economics. If the direct cause of criminality and pauperism could be accurately ascertained, I will venture the opinion that the prevailing causative factors would be physical defectiveness and social surroundings. If, therefore, either of these can be even materially mitigated, a distinct impression would become one to be worthily considered by the economist, philanthropist or so-

ciologist. The improving of either physical or social surroundings in adult life is a problem of almost hopeless perplexity, while if these foes to radical prosperity be attacked in the budding period of human existence, the difficulties are immeasurably mitigated.

Concerning the last of these misfortunes, or the social surroundings of individuals, I will have nothing to say, but as a medical man I am interested, intensely interested in the first proposition, referring to physical defectiveness, and I sincerely believe that if the relievable bodily abnormalities of children could be eliminated a mighty factor encouraging idleness, poverty and crime, to say nothing of human suffering, would be driven forcefully to obscurity.

"Prevention is better than cure" is an old adage, and is no where more truthfully exemplified than in the subject under consideration. The adage might be somewhat altered to read: "Prevention is possible a thousand times, while cure is possible but once," and still not stray very far from the truth. So true is this that almost all great reforms and philanthropic movements tending toward the physical, mental, moral and sociological uplifting of humanity, are surely and inevitably endeavoring to grapple with the subject in the earliest years of childhood, before the withering and decadent breath of human degeneration have rendered upward and improving conditions well nigh impossible.

Perhaps nothing more surely indicates the nobility and unselfishment of the medical profession than its recognition of these principles, and its beneficent work in the direction of preventive hygiene and medicine. Its best efforts are directed toward the elimination of disease, thus presenting the only instance in professional or commercial life where strenuous and constant efforts are made to destroy one's

income. While it would be most interesting and instructive to dwell upon the various bodily infirmities of children that militate against their intellectual, moral and sociological advancement, the space allotted for my talk is all too short to permit of such a digression. I shall, however, endeavor to impress upon you the importance of those eye and ear defects which deter or prevent the afflicted child from acquiring those educational advantages which properly equip him for the great battle of life, the struggle for existence.

Come with me to the clinic and see a poor child of perhaps foreign extraction. Notice its attenuated form, its pinched countenance, its bloodless, ill-nourished appearance, its unintelligent, unresponsive aspect, all indicating insufficient nutrition before and after birth, and general lack of proper food, air, care and hygiene during the brief span of its miserable existence. If its eyes are examined with suitable apparatus, short-sightedness or long-sightedness of enormous degrees, or possibly a cataract will be found, due doubtless to defective nourishment or general neglect, either before or after birth. Place this child in a school where physical defects are unrecognized and watch the result. He is unable to see distinctly, and headaches, pain and general discomfiture follow all his efforts at study. He cannot even see the blackboard and charts, printed books are indistinct or seen with much effort, the faces of his teacher and comrades are blurred; he does not know what is the matter, but he finds it impossible to keep pace with his fellows, and he acquires a hatred for school; his endeavor to acquire an education becomes abortive; he falls behind in his class, becomes discouraged and truant, and finally gives up the effort, joins the ranks of street gamins, develops criminal tendencies, is sent to a reformatory and does not

reform and may easily end his life in the penitentiary or on the gallows.

Pass from this defrauded child to another of similar miserable appearance, but with unusually stupid countenance, produced from enlarged tonsils or adenoid tumors in the throat, which prevent proper nasal breathing, and cause him to keep his mouth open in order to breathe. Eventually he becomes deaf, either through obstructive and catarrhal influences, or on account of chronic middle-ear discharge, which is an actual and constant menace to his life. His generally open mouth, with his deafness, leads him to be considered stupid, if not idiotic, an impression which is daily strengthened by his poor personal progress, impossible to overcome his unfortunate physical infirmities. Eventually he, likewise, neglects his studies, hates his school, becomes a street habitue, idle and dissipated, and may easily terminate his existence amid crime and its consequences.

These are no fancy pictures which I have painted in lurid hues for your delectation, to point the moral of my theme. They are true, living, breathing, pulsating facts that must be familiar to every student of hygiene, criminology or sociology. If education is worth anything in the broadest sense, and if it passes beyond the borders of dilettantism into the broad realms of those influences which stand for human uplift, then it should reach down, down to the very dregs and bottom of the social scale, and pull up the most unfortunate of the human race, and place them on a par with their fellow-men. You and I both know that education will perform this great evolutionary process, and I claim that it is the inalienable, inborn right of every citizen of this great, magnificent republic to be placed in a position where an education may be acquired. I also claim that inasmuch as we must look to education to solve many of the

problems of today, and that the more knowledge is diffused throughout the length and breadth of this land, the happier and better will the land become; that it is the distinct, moral, and economic duty of society and the state, to see that educational advantages are afforded wherever such conditions are in any wise possible. I further believe that wherever obstructions exist, blocking the way toward educational acquirements, they should, as far as possible, be dissipated by those guardians of the public welfare having such matters in charge. I believe that public school officials should maintain a strict surveillance over the physical as well as over the intellectual and moral welfare of those children committed to their charge. A large portion of a child's life is spent in school, and teachers should, and I believe do, take a sincere and watchful interest in the bodily condition of their pupils. The necessity for such observation is the more accentuated because a large proportion of such children come from homes of ignorance, filth and vice; where mothers and fathers apparently care but little for their offspring, and evidently desire to shirk all possible moral responsibility. Under such circumstances the burden should fall upon the shoulders of the state authorities, both medical and educational, whose best endeavors should be taxed in vicariously officiating as both father and mother to those poor unfortunates whose earthly advent has been signalized by distress from birth to older years.

The pity of it is that practically all eye and ear conditions could be cared for and cured if detected early in life by the annual, systematic examination of all school childrens' eyes and ears, and of the various methods that have essayed from time to time to accomplish this purpose, the examination by school-teachers is the only one that has been even reasonably successful, and is

surely the only one that contains sanguine prospects of becoming universally adopted. Such examinations would be made if only all health and educational authorities, aroused to the importance of the situation, would issue their separate orders that such examinations must be made; the pity of it is do not do it. A large proportion of the idle and criminal classes is being supplied and resupplied, as generation after generation of children are thrown upon the world by children who, for some reason or other, have failed to acquire the education which enlarges and uplifts the soul in character and opens up avenues for honorable and useful employment. Visit the criminal courts, the reformatories, the jails and prisons, and how often do you find lawbreakers who have been plucked from the ranks of the educated? Occasionally, it is true, but the great rank and file of these offenders are men and women of meager or no education. Some, it is true, are natural criminals, the offspring of criminal parents, but even here there must have been a beginning, proceeding some generations back, perhaps from some ancestor who was deprived of an education by some physical defect, possibly of the eye or ear. The great mass of criminals, however, are not born offenders, but become so through associations and lack of a cultivating and ennobling education, which is, of course, impossible if physical defects place such an education beyond their reach. I have no desire to magnify my theme, and do not by any means believe that all crime could be expunged from society by the correction of the physical defects of children, but I earnestly believe that there is enough matter in this subject to claim the fixed attention of sociologists, health and educational authorities and law makers, both as a matter of moral obligation and public economy.

The physical condition of our children reaches down then to the very

sub-structure and foundation of society. The boy of today becomes the man of tomorrow, to whom we and succeeding generations must look for the advancement and prosperity of our country. The child cannot act for himself, and often the parent is equally helpless, or careless. It behooves us, therefore, who have such matters in charge to act for him, and to act wisely and well. His physical and moral, as well as his intellectual status and progress, should be closely guarded and watched, and probably no avenue through which he can be reached is so important and accessible as the public school. Here he spends most of his waking hours, and it is here that his body, mind and heart should be under the strictest surveillance. The school requests, nay enforces, his attendance, and volunteers to superintend the unfolding of his young life in its most critical period. It is, then, the sacred duty of school teachers and authorities to note well their important and self-assumed obligations, and to give the child the benefit of the best and most modern thought and judgment upon this sacred and important subject. Our schools undoubtedly provide opportunities for great intellectual advancement, and I believe that the general moral tone of our schools is of a high quality, but what of the physical condition of the scholar?

I believe we must all view with pride the marvelous evolution of our public schools and our educational system, notwithstanding the fact that over ten per cent of the children of this country can neither read nor write. But while viewing with satisfaction the marked advance during the past twenty years, in means and methods of teaching, I contemplate with peculiar satisfaction the care for the development of the body that is now evident in all schools, and which must rightfully be largely attributed to the untiring work and writings of the medical profession. Wit-

ness the playgrounds, with their gymnastic apparatus, the baseball, football and golf teams; observe the sanitary buildings, well-lighted and ventilated; notice the well-built and adjustable desks, the well-printed books, the good drinking water and clean cups; see the careful seating of the scholars, with reference to their vision and hearing, not forgetting the conscientious supervision of each scholar's physical condition by the average room teacher and the medical school inspector. Such observation must make us realize that progress has indeed been made, and that while much remains to be done we have no reason to feel ashamed of the advance and accomplishments of the past, and have much occasion to believe that the future holds in its hands the full fruition of all our hopes.

Two things are necessary to raise corn; one is the seed, and another is a favoring soil and conditions. So it is with the enlightenment of the young. The means of education are necessary, viz: The buildings, properly placed, constructed and conducted, including systems, books, etc., and then the child with the receptive mind and healthy body and senses, capable of receiving instruction and profiting thereby. We are surrounded by the means of education, for modern schools with their effective machinery are a source of gratification and delight to all; but enthusiastic, progressive and systematic educators do not always consider the soil upon which the seed of enlightenment falls; in other words, they are disposed to consider children as a massed entity, and do not separate them into isolated individuals, with distinct inheritances and mental and physical peculiarities rendering them more or less adaptable to the requirements of the modern public school. Children are thrown into the great machinery of school life, are divided into grades and are expected to adhere to them and become educated ac-

cording to a certain system. A child may have a weak or crooked back, which will become aggravated by close confinement at improperly constructed desks; he may have lungs handicapped with incipient germs of tuberculosis, encouraged by the protracted inhalation of vitiated school air; he may languish from general systemic impoverishment, and pine and droop under too much study and too little fresh air. These are some of the conditions noticed in school children, militating against the easy acquirement of an education; but more directly essential still are the existence of certain abnormal conditions of the organs of special sense of seeing and hearing, which are certainly of prime importance in the imbibition of presented instruction. If a child cannot see well and hear well, his position is certainly most unfortunate in the modern public school, where he is expected to keep up with his grade work or else subject himself to chagrin and mortification. Do not understand me as saying that our schools are likened to the Car of Juggernaut, that ruthlessly throws down and crushes all who unfortunately come in contact with its destroying wheels. Far from it. I fully appreciate the gentle, humane and sympathetic feelings that proceed from the hearts of most teachers toward those children committed to their care. I am not unaware of their watchfulness and solicitude over their little flock, that prompts them to change the seats of the deaf and near-sighted, to make allowance for noticeable physical or mental shortcomings, to frequently visit parents and urge upon them the necessity of action concerning the health of a child; but these are isolated, though frequent instances, inspired by individual sympathy and character, and restricted by necessary ignorance of such subjects on the part of the teacher. What we want is a paternal systematic school system of health in-

vestigation, by which the physical defects of children will be made manifest, and steps taken to protect pupils against themselves, and in many instances against their parents. We also want a system that, after these unfortunate conditions have been discovered, will not only allow but insist upon the harmonizing of the studies to the child, and not the child to the studies. I am not unaware of how often this is done. That a doctor's certificate of poor health is usually respected; that the course of study is sometimes changed under the advice of the parent or teacher; but I think I am not wrong in saying that these changes are comparatively infrequent and so little encouraged that children will often endure much physical discomfort or even suffering rather than assume the chagrin and mortification brought upon them by the unenviable distinction of a grade change. These changes should be inspired from the intelligent illumination of regular physical examinations, and should be so common as to excite no comment, and give rise to no loss of a pupil's self-respect, or disappointment on the part of the parent, who frequently allows a child to languish and acquire permanent invalidism rather than interfere with his class standing or the date of projected graduation. I would not be understood as advocating the abolition of systems and grades. It is needless to say that schools cannot be properly conducted upon other principles. Neither do I advocate the indiscriminate changing of grades, without just and adequate consideration. Grades are frequently changed for good and sufficient reasons. I advocate more system and more grades. I advocate a system of physical examination in schools by which we may know the condition of a child's health and not trust to chance or circumstance to detect it, and I advocate more and shifting grades, commensurate with

the physical condition of defective children. In other words, I do not believe in the wholesale education of the rising generation, which is our country's hope, its bulwark and defense, and whose physical as well as its moral and mental condition is a sacred trust which we must cherish. I do not believe in thrusting these little, yielding, impressionable, often sickly lives, into a common crucible to be moulded and turned out with identical exactitude and precision. I believe that children should not be damaged by their educational existence, but should emerge from the portals of the American public schools in better physical, mental and moral condition than when they were entrusted to its fostering care, and that steps should be taken calculated to bring about the fulfilment of this plain and imperative duty.

While the physical examination of children should include all children, rich or poor, young or old, it is to the poor and neglected child that they must of necessity become the most useful. The children of well-to-do and intelligent parents are usually, though not always, well cared for through parental love and solicitude, and their slightest ailments ministered unto by the medical advisor, but it is quite otherwise with the children of the tenement, the hovel and the slums, who frequently are parentless or—God knows—might better be. If obstructions exist militating against this Utopian condition, which are relievable by acts undertaken by the guardians of the public welfare, they should not shrink nor hesitate in the execution of their duty, but should cheerfully and promptly perform such acts and, if necessary, vicariously assume the office of father and mother to those who are bereft either by death or unfortunate condition of the benefits of such benignant influences.

The responsibilities of school authorities along these lines is enormous and

involves, amongst other things, such questions as the location of school buildings with reference to air, space, noise and drainage; the construction of the building itself with regard to window 'space, and the direction of light, proper ventilation, plumbing and heating; the necessity for good and artificial illumination; the prevention of overcrowding; the necessity of medical inspection before and during school life; the use of proper drinking water and cups; the providing of wash stands, towels, etc., that will be free from contagion; the construction of desks of different sizes for different ages; the use of desks that are of the proper slant and height, and compel an upright position in reading and writing; the frequent intermission from studies and the change from one study to another, thus compelling a combined rest of the eyes, mind and body; the proper regulation of the means of study, such as the distance and color of blackboards, the color of slates, the character of print and the paper on which it is printed; the necessity for vaccination; the exclusion of contagious diseases, and the exertion of advisable quarantine regulations; the placing of scholars in grades suitable for their physical and mental conditions; the forbidding of too many studies, in order to prevent much home study; the supervision of games, sports, etc., and the general physical health of scholars; these and many other problems must be met and solved by school authorities, and upon their wise and conservative opinions and acts depend very largely the ocular and aural health of children and the general well-being of the coming generation.

One of the most important topics for those who manage schools to consider is the proper care of children during the period of adolescence; in other words, between the ages of about fourteen and eighteen. During the course

of this wonderful unfolding of Nature's purposes, the nervous, mental and physical condition of the child is in a peculiarly sensitive and precarious condition, Nature is busy with her physiological changes, the child's resistance is taxed to its utmost, and during this important epoch of existence the individual should surely be relieved of all unnecessary physical, nervous and mental taxation. This is not the time for excessive study, either at school or at home, it is not the time for grade vaulting, or extreme mental activity, and yet how often do we see children, ambitions themselves, perhaps, or forced to unduly studious habits by ambitious parents or teachers, paling and fading away from over-application, until a broken-down constitution, thus early in life, proclaims the folly of undue prosecution of a prevailing error.

The examination of school children's eyes by regularly appointed oculists is no novelty. It has been done many times by numerous workers. The plan of ocular inspection by oculists, however, while ideal in theory, possesses the disadvantages of the great and unnecessary expenditure of public funds and the inevitable production of much professional friction. Concerning the first objection, it must be apparent that competent medical men could hardly devote such large amounts of time to annual investigations of this nature, which would practically consume the time of several men in large cities, without at least some compensation, which would necessarily add materially to the school budget, and certainly incompetent men would be undesirable. Relating to the second objection, bearing upon the production of professional disturbance and friction, should one or several oculists be selected to personally examine all the public school children in a given city, it can only be said that such conditions would be but natural and human. The

power thus placed in the hands of one man, or several men, would be enormous, and the opportunities for personal aggrandizement and gain, professionally and financially, so great that but few men could successfully withstand the temptation. I, therefore, on February 6th, 1895, in a paper read before the Minnesota Academy of Medicine, proposed a plan for the annual systematic examination of school children's eyes by school teachers, which was shortly after placed in operation in public schools in Minneapolis, St. Paul, and other Minnesota towns. On December 30th, 1897, I read a paper before the Associated Minnesota School Boards in St. Paul, in which I proposed that not only should the eyes of school children be annually examined by school teachers, but that the ears, noses and throats should be examined also through the agency of a few simple, pointed and pregnant questions and observations. This paper was supplemented by another which I read April 9, 1898, before the Chicago Teachers' Club, in which I introduced a new testing card, combining in convenient form not only the Snellen test letters, but also minute and explicit directions to teachers as to how the tests might be made. The salient features of the tests are that they shall be systematically performed each fall by school teachers. I say "systematically performed" because they should be made regularly as any school function, as otherwise their efficacy is almost lost. Many teachers imagine themselves to be enacting their complete duty when they maintain a general supervision of their pupils' eye and ear, observe palpable defects and occasionally refer their pupils to medical advisers. This is good as far as it goes, but it is totally inadequate as a substitute for carefully arranged questions that, when answered, will disclose the existence of ninety per cent. of serious eye, ear, nose and throat diseases. The occa-

sional superficial and unsystematic observation of pupils' eyes and ears cannot be safely substituted for thorough, stereotyped tests that have been thoughtfully and intelligently framed for the detection of disease; and yet many ignorant but well-meaning teachers feel that comprehensive annual tests are entirely unnecessary, forgetting the fact that while conspicuous departures from health may be evident to the casual observer, many hidden but serious conditions are only detected by minute and careful examination. Besides this, unless tests are distinctly expected from each teacher many children will escape thoughtful observation of even the most limited character, for while most teachers take a deep interest in their scholars, and conscientiously endeavor to promote their interests in every way, intellectually, morally, and physically, still teachers are frequently seen who regard their profession lightly, and endeavor to get through each day's work with as little personal effort as possible. Under such circumstances it is certainly too much to expect that much time will be given to the investigation of the physical condition of the pupils, and the child is, therefore, nearly as much neglected, or subjected to nearly the same degree of lack of intelligent supervision, as can be found in many of the squalid homes of public school children. The tests, therefore, should be uniform and systematic, and should annually include all pupils above the first grade, as it has been found impossible for teachers to satisfactorily examine quite young children. Some teachers have the impression that a child needs only one examination, but inasmuch as eye, ear, nose and throat diseases may develop from year to year in previously healthy children, it is essential that each annual test should be made early in the fall of the year, and should become an integral part of the school curriculum. By making

the tests shortly after the opening of the fall term, the physical condition of the pupils is early ascertained and steps can be taken towards the correction of any existing abnormalities. Such parents should be warned of the presence of physical defects in their children, and if they fail to act upon such warning the teacher will have ample time to counsel child and parent concerning the necessity of a medical consultation, which would hardly be possible if the tests are postponed until the close of school in the spring of the year. Besides this the fall tests will have the advantage of enabling the teacher to co-operate with the physician in the execution of his advice, and to observe the results of treatment in afflicted children.

Some objections have been raised to the examinations being made by school teachers, some feeling that parents would object, others that teachers are incompetent, and still others that it is an unjust tax upon the time and energy of the teachers. Concerning the first of these objections, its triviality is almost sufficient for its dismissal, and it need only be said that the tests are absolutely harmless and painless, that no instruments or appliances are used, and that the child is practically not even touched during the examination. Should any child or parent object, however, acquiescence to their wishes should be observed, as compulsion is undesirable, and clashing with parental authority should always, if possible, be avoided. Concerning the incompetency of teachers; I have only to say that any one who is competent to be a teacher can make the tests with perfect ease. They are absolutely simple and uncomplicated, consisting of such questions as: "Does the pupil habitually suffer from inflamed eyes or lids?" "Is the pupil probably 'cross-eyed'?" Does the pupil fail to read a majority of the letters in the number XX (20) line of the Snellen

test types with either eye?" Does matter (pus) or foul odor proceed from either ear?" "Does a pupil fail to hear an ordinary voice at twenty feet in a quiet room?" etc., etc. The ascertaining of simple facts of this nature does not require a medical education, and can easily be compassed by anyone of ordinary intelligence and tact, and strange as it may appear, correct replies to the nine questions specified in the examination instructions, will disclose the existence of at least ninety per cent. of serious eye, ear, nose and throat diseases. For instance, the question "Does a pupil fail to read a majority of the letters in the number XX (20) line of the Snellen test types with either eye?" will disclose the existence of near-sightedness, and many cases of hypermetropia and astigmatism. It will also detect cataract, scars of the eyeball, inflammation and atrophy of the optic nerve, etc. The question, "Does the pupil habitually suffer from inflamed lids or eyes?" will detect all inflammatory diseases of the various external tissues of the eye. The question, "Does the pupil fail to hear an ordinary voice twenty feet in a quiet room?" detects all forms of deafness, whether due to ear wax, catarrh, nerve or middle ear disease, etc. The question, "Is the pupil an habitual mouth-breather?" discloses internal nose diseases, polypi, adenoids, enlarged tonsils, etc.

It will, therefore, be seen that notwithstanding the extreme simplicity of the questions, they are most comprehensive in their character, and are capable of detecting a vast majority of serious eye, ear, nose and throat diseases, and while the teacher cannot, and should not, attempt to make a diagnosis of the pupil's malady she will at least know that something is wrong, and this is quite sufficient; the physician consulted will do the rest. In case some abnormal condition is disclosed by the tests, the teacher sends the pa-

rent a card of warning, stating that some disease is believed to exist, which is not only unfortunate for the child, but will retard the progress of education, and advising the parent to consult the family physician or some specialist, either at the office or free dispensary. It will thus be seen that there is absolutely no reason why an intelligent teacher should feel at all incompetent to make these tests, and it is earnestly hoped that this objection will now be relegated to obscurity.

Concerning the objection to the tests on the ground of its being an unjust tax upon the time and energy of the teachers, I have only to say that if the tests are made according to my instructions, this objection is quite as valueless as the others to which reference has just been made. Some years ago, when the tests were first introduced, the school principals personally performed the work, which, when it is remembered that in many of the city schools there are perhaps 2,000 scholars, became quite a burdensome and protracted labor. I now advise that each teacher examine the pupils in his or her room, and as there are rarely more than 50 children in a room, the extra work imposed is certainly quite inconsiderable, and can easily be performed by either keeping a few children after school each day for a week, or, what is much better, having a regular half day set aside each fall, by the school superintendent, to be devoted to the tests. In this way it can be seen that the tests can easily be made in a week or a day, according to the method adopted, for from three to five minutes is all the time required for each pupil, and by thus systematizing and subdividing the work among room teachers, all the pupils in a city school can be examined in the time specified. Some have suggested that the work be done by school cadets, and this is not a bad plan, inasmuch as the teachers live in closer contact with the chil-

dren and come to learn their physical defects by daily observation, it would seem as if they were better qualified to answer the questions propounded in the test than anyone who might be otherwise designated for the work. I further believe that instead of the tests imposing more work upon already overworked teachers, that in the end their work will be materially lightened, for many defective children, who from apparent stupidity induced by unrecognized eye or ear defects, obstructing the way to educational requirements, are the despair and dread of their teachers, who spend hours of time in nerve-exhausting labor in the hopeless endeavor to maintain their grades, may be suddenly transformed by glasses or other eye or ear treatment, from thickest density into intellectual brightness, thus relieving the teacher of at least one burden that sends her home at night in a condition of physical and nervous exhaustion. I am confident that if the eye, ear, nose and throat defects in any room in any school could be eliminated, the work of the teacher would be enormously lightened, and if this is true they should be willing from purely selfish reasons alone, to say nothing of the benefits to be acquired by the pupils, to cheerfully and gladly see that these tests are annually executed.

Some critics fail to commend the results of the tests because many parents disregard the school warning. This criticism seems rather puerile, and is equivalent to refusing a \$100,000 legacy because \$1,000,000 was not left to the beneficiary. Undoubtedly many parents through ignorance, impecuniosity, pride, neglect, etc., fail to seek medical advice for their children after cards of warning from the school authorities have been received; but on the other hand a large majority of the parents warned unquestionably do as they are advised, and profit thereby. It has also been observed that most of

the parents who primarily ignore the warning, from seeing the beneficial results upon their neighbors' children, or from the awakening of latent parental responsibility, or from some other cause, eventually seek medical advice, and become stout advocates of the plan. In any event, even if only a small minority of defective children are benefited by the tests, they are certainly worth while, and the tests should not be abandoned because all parents are not ready to receive them.

Some observers regard the tests lightly because they are frequently abandoned after having been used for one or two seasons. This is a most unjust criticism, and does not in any way argue in favor of the inexcusable neglect and laxity of the school authorities. There can be no doubt of the enormous utility of the tests when properly and persistently applied, and yet, it is but human nature to shirk all possible work, and as most teachers are already overworked, unless the school authorities annually urge, or demand, the execution of these tests, they may fall into disuse and eventual abandonment. I wish, then, to earnestly plead with those in authority not to leave this matter to the option of the individual teachers, but to require that the tests become a regular part of the school curriculum and that they be annually performed at the commencement of each fall term. Many teachers object to the tests on account of the elaborate records and statistics suggested or required in some cities where the plan has been adopted. When I first proposed the tests I advocated rather elaborate statistical records be kept by the school teachers. Experience has, however, considerably dampened my ardor in this direction, and I now recommend the very simplest records, or none at all. A multiplicity of records can scarcely aid us in deductions which are already trite, and from the exami-

nations of thousands of teachers' reports I can hardly recommend them as very valuable from a medical standpoint. To my mind they represent more useless work than actual value, and while some records could be possibly maintained, I would advocate that they be of the most elementary character, perhaps simply giving the name of the pupils, and whether it was for an eye, ear, nose or throat defect, etc. This brief report could be handed to the school principal and then to the school superintendent, and would simply show that the tests had been made, which is really about all that is necessary. I wish emphatically to urge that the less elaborate the tests can be made in every way the more surely will they be performed, and that there is no surer way of defeating the end in view than by elaborating and embellishing what should be a simple and uncomplicated affair.

Some critics have objected to the tests on account of their expense. In the first place even if the expense was multiplied many times its actual amount, this objection should shame the objector when the enormous possibility for good, resident in the tests, is considered. Besides this the expense is so small that it should not for one moment be considered, as even for a large city containing 5,000 school rooms the expense need not exceed \$100.00 a year after the first year. Each room should possess a testing chart, which will be subsequently described. When purchasing in large quantities these charts, teachers' instructions attached, can be purchased for \$40.00 a thousand. A city with 5,000 school rooms can, therefore, be supplied with a chart for every room for \$200.00. After being used the charts can be carefully laid away and preserved for future use, so that new charts will only be necessary once in several years. The only other expense will be for the warning cards to be sent

to parents and the simplest report blanks to be retained at school, which, for even a large city could not exceed \$100.00 a year.

I have been at work on this movement ever since 1895, endeavoring to perfect and simplify the plan, and to secure its adoption in the various cities and states. Over ten thousand mailed communications of various kinds, including letters, circulars, etc., have passed out of my office during that time. Much encouragement and some slight opposition has been encountered, but the work has gone steadily on, and to-day the tests are quite generally used throughout the United States, and in some cities in Europe and Asia. At a recent meeting of the American Medical Association I secured the passage of the following resolution, both by the Eye Section and the General House of Delegates:

"Whereas, the value of perfect sight and hearing is not fully appreciated by educators, and neglect of the delicate organs of vision and hearing often leads to disease of these structures, therefore, be it

Resolved, that it is the sense of the American Medical Association that measures be taken by boards of health, boards of education, and school authorities, and, where possible, legislation be secured, looking to the examination of the eyes and ears of all school children, that disease in its incipency may be discovered and corrected."

I sent a copy of this resolution to the president and secretary of every medical society in the United States, and asked them to secure its adoption at their next meeting, believing that the favorable action of the American Medical Association and the various state medical societies would be a strong argument to the different state boards of health and education. Nearly every state medical society in the United States has passed the resolution. I am also gratified to state that most of the state boards of health and education have taken more or less energetic action in the matter and the tests have become a law by act of legislature in Connecticut, Vermont and Massachusetts.

MEDICAL PROGRESS

The Difficulties of Differential Diagnosis.—Dr. Richard C. Cabot, of the Massachusetts General Hospital (Indianapolis Medical Journal), has just concluded a series of 3,000 cases brought to autopsy, that were studied both before and after death. In typhoid, 92% of the diagnoses were correct; diabetes, 95%; aortic disease, 84%; cancer of colon, 74%; lobar pneumonia and chronic glomerulonephritis, 74%; cerebral tumors, 73%; tuberculous meningitis and gastric cancer, 72%; mitral stenosis, 69%; cerebral hemorrhage, 67%; septic meningitis, 64%; aortic stenosis, 61%; active phthisis, 59%; miliary tuberculosis, 52%; chronic interstitial nephritis and thoracic aneurism, 50%; hepatic cirrhosis and acute endocarditis, 39%; peptic ulcer, 36%; suppurative nephritis, 35%; renal tuberculosis and bronchopneumonia, 33%; vertebral tuberculosis, 23%; chronic myocarditis, 22%; hepatic

abscess and acute pericarditis, 20%; acute nephritis, 16%.

Paronychia.—Ichthyol is helpful in the treatment of chronic non-suppurating paronychia (American Journal of Surgery). The underlying cause of the affection must be sought—syphilis, eczema or favus of the nail, the use of caustic alkalies on the hand, etc.

New Treatment of Persistent Diarrhea.—Fuld (quoted in The Prescriber), has found that in a large proportion of these cases the underlying trouble is a reflex irritability of the gastrointestinal tract. To allay this condition he prescribes a 3% solution of cocaine hydrochlorid with an equal quantity of codein phosphate in peppermint water, giving ten drops of this solution in water ten minutes before each meal. For children a 1% solution is employed, one drop being

given for each year of the child's age. The author has tried the method in fifty cases with satisfactory results, and he claims that as a rule two days of the treatment is sufficient to effect a cure.

To Prevent the Paroxysms of Inebriety.—T. D. Crothers (December Buffalo Medical Journal) says that a safe combination which can be used on the approach of the drink paroxysm is 1/60 grain strychnin nitrate with 1/100 grain atropin sulphate, every three hours. "If with this, calomel purgatives are given and baths, often the paroxysm may be averted."

How to Look for Hookworm Eggs.—Estill D. Holland (December Medical Herald) directs to have the patient save about a dram of his stool in a wide-mouthed four-ounce bottle. When the doctor gets the specimen, he should fill the bottle nearly full of water and shake it until the feces are well mixed and dissolved. Let the mixture stand for a few hours, and then take a few drops from the bottom of the bottle for examination. He has often found these eggs in the stools of patients from the North, and in patients with diarrhea, normal bowel movements or with chronic constipation. A great many such patients had no remembrance of ground itch or of going barefooted.

Rectal Administration of Salvarsan in Children.—Well, Morel and Mouriquand (quoted in New York Medical Journal) have tried out the rectal method successfully in children, in whom the intravenous administration of remedies is usually extremely difficult. In one case of congenital syphilis and two cases of chorea, in children from 6 to 13 years old, successive doses of 0.1, 0.2 and 0.4 gm. of salvarsan were given per rectum. The drug was prepared as for intravenous injection, mixed with about 100 c.c. of 0.5% salt solution and 5 or 10 drops of laudanum, and slowly administered through a tube 1.5 meter long, introduced as deeply as possible into the rectum. Care was taken to have the fluid retained at least four hours. In each case pronounced improvement was noted, and there was entire absence of unpleasant reactions.

Diagnosis of the Source of Hematuria.—Swords and Ader (December New Orleans Medical and Surgical Journal) give a number of practical points in this connection, of which we excerpt a few: Hematuria due to traumatic rupture of the perineal urethra

is usually accompanied by a perineal tumor and reflex retention of urine. "Distilling urethrorrhagia" (blood escaping from meatus drop by drop) is observed with polypi and calculi of the urethra (diagnosed with urethroscope). A "washing" initial hematuria is noted at the beginning of urination when the blood comes from the urethral glands, prostate or seminal vesicles. Such a slight hematuria, slightly cloudy and rusty-colored, should make us think of a beginning cancerous prostate (hard and filled with nodules). Cystitic hematuria is manifested by pain, pyuria and frequency of urination. The blood is present during the whole of micturition or only at the end. Among the signs of tuberculous hematuria are the general run-down condition of the patient, the existence of other lesions of the urogenital apparatus, and particularly "the frequent presence of a nodule, round and hard, at the junction of the prostate and one of the seminal vesicles;" also, of course, cystoscopic findings, tubercle bacilli in the sediment and the guinea-pig test. Calculi and other foreign bodies in the bladder cause hematuria on moving, lifting or jolting, bleeding being accompanied by pain radiating toward end of penis, pyuria, frequent micturition and occasional stopping of the urinary stream. Blood from the bladder without cystitis is usually due to one or more new growths, and is spontaneous and either diurnal or nocturnal. The general characters of renal hematuria are: First, it is rather marked, except perhaps in the tuberculous form; second, it is generally total (urine equally colored from beginning to end of micturition); third, the bloody urine contains long clots, rounded and moulded in the ureter. The three chief causes of renal hematuria are calculi, cancer and tuberculosis. Hemorrhage due to renal calculus is often associated with pyuria and with pain in the lumbar region, radiating down the groin into the testicle, and the pain is provoked. Hematuria due to advanced cancer is nearly always spontaneous with intervals of clear urine, and the kidney is enlarged. Tuberculosis of the kidney may give only an occasional tint to the urine, which is always cloudy because of pus. The patients are generally children or young adults. Other less common causes of renal hematuria are acute nephritis due to scarlatina, diphtheria, pneumonia and other infections; chronic nephritis (with albumin and casts); renal congestion during pregnancy; floating kidney (especially right side in women); medicinal irritants (mercury, cantharides); and the filaria sanguinis.

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MEDICAL POLITICIANS VERSUS MANUFACTURING PHAR- MACISTS.

The debt which the medical profession owes to the great pharmacal houses is inestimable. Not only do these firms isolate the active principles of plants and physiologically standardize our most important official remedies, but they are constantly endeavoring, at considerable financial outlay, to discover new remedies and improve upon old ones. The work which they do is entirely beyond the scope of retail druggists, and indeed most pharmacists nowadays buy their fluid extracts and tinctures instead of making them.

Among the oldest (founded, 1866) and foremost of the world's great pharmaceutical manufacturing houses is the

firm of Parke, Davis & Co., to whom the discovery of cascara, adrenalin and many other valuable medicines can be attributed, and whose products are always up to the official standards. Of recent years this house has been conducting a clinical research experimental department, in which new products are tested out in the only certain way, that is, upon human patients, by some 3,200 of the really active and useful physicians and surgeons of this country, before these remedies are placed upon the market, if at all. The writer personally knows of three agents (pneumococcus vaccine, mercury succinimide and a vegetable diuretic) which were never offered for sale, simply because the mass of opinion of the clinical co-workers was adverse to any actual merit in these preparations.

In re the Schafer phylacogens, Parke, Davis & Co. began to investigate Dr. Schafer's claims in January, 1911, and did not sell a single package of the same until March 1, 1912, meanwhile having placed without charge some 40,000 packages in the hands of reputable physicians for a fair clinical trial, at an expense to the firm, it is said, of about \$100,000; at the same time inviting reports from physicians who had used the phylacogens and experienced results not entirely satisfactory. That the phylacogens have come to stay, there can be no more doubt than of the ordinary vaccines. Too many practitioners have seen good results from their use, to deprive their patients of this unique aid in time of need.

But now comes the Captious Critic, who, by some strange fatuity of fate (predisposed by peanut politics), has become, in his own estimation, the Czar of the American medical profession, and he says, says he, that phylacogens can be of no service to suffering mankind, since they have not been proved out in dogs, cats, frogs, mice and guinea pigs, and that "no definite conclusions are permissible because the observations lack reliable and adequate control," etc., etc. He likewise magnifies the suggestion of the manufacturers as to telling the patient after (and not before) the dose has been given, about the chill and other disagreeable symptoms which may follow the administration of phylacogens. (Who among us, in giving ordinary vaccines, does not follow the rule of first injecting the dose, then telling the patient that if the arm becomes red and swollen he should apply hot compresses?) The aforesaid editor reproduces and becomes quite caustic over an advertisement which is perfectly proper in a drug journal, but which he construes as a diabolic effort to seduce and exploit physicians via the pharmacists. (Who ever knew a druggist to administer phylacogen or to induce a physician to do so?)

Muckraking is a dirty business, whether the fecal odors are evoked by some poor pot-boiling word-monger attached to a yellow daily or monthly, or by the gr-r-r-eat editor (or, more precisely, political director) of a big medical weekly. The method of a muck-raker is to distort facts, to "make a mountain out of a mole-hill," and to bring in irrelevant side-issues in order to pad out a case. His object in raking the muck is lucre, blackmail, revenge or political power. It requires no wizardry to perceive the vindictive animus which inspired the attack upon a leading manufacturing firm, because, forsooth, it no longer cared to dignify the mediocre oracles of the "Council of Pharmacy and Chemistry," by submitting remedies to their self-appointed censorship. Let any fair-minded man compare the facilities and equipment, the brains, energy and experience at the command of Parke, Davis & Co., with those of any little aggregation of self-appointed medicopolitical tin gods—will not he prefer the former to the latter? What might happen to the public as well as the medical profession, if medical politics had the control which some of its advocates appear to desire, may be judged from the experience of St. Louis. Some years ago, this municipality decided to make its own diphtheria antitoxin, and so cut out all commercial interests. The result was a widespread outbreak of tetanus—perhaps the most serious that ever occurred in any American city—and St. Louis returned to the better plan of buying the antitoxin made by people who not only knew how, but had also the requisite facilities. What though the "reformers" rave, in the mean while the main body of busy medical men go on their way, doing the best they can for their patients, regardless of the frantic antics of borborygmic blatherskites.

THE CIVIC OBLIGATIONS OF MEDICAL MEN.

Physicians and surgeons are granted exemption from jury duty in this country. As a return for this favor, they should deem it no hardship to make a prompt and complete report of deaths and cases of contagious disease. It is the failure to perform this duty which so often renders medical statistics rank as the third kind of lies. For example, in Denver last year, according to the city health commissioner, Dr. J. M. Perkins, there were apparently 727 fewer births than deaths, and 22 fewer births than in 1911. But this a la Paris tendency to race suicide is mostly only on paper in the virile Queen City of the West.

As to the use and necessity of reporting infectious diseases, whether subject to quarantine or not, there can be no question. For instance, a few years ago an outbreak of typhoid fever on the north side was quickly traced to its dairy origin, in part through reports of the cases showing the milk supply of the family affected. The more contagious disease outbreaks are frequently readily controlled in the beginning, if only the doctors who see the first cases in the neighborhood report at once to the local health officer. The diseases now reportable in Denver are diphtheria, scarlet fever, typhoid fever, measles, chicken pox, erysipelas, whooping cough, smallpox, mumps and meningitis. Gonorrhea, syphilis and tuberculosis are on the waiting list.

WHY PRESCRIPTIONS SHOULD BE WRITTEN IN LATIN.

In a recent after dinner address before the members of the Medical Society of the City and County of Denver, Dr. Harvey W. Wiley, among other bon mots, stated that doctors should write their prescriptions in English and so avoid mistakes. Although a graduate from a medical college, Dr. Wiley has

never practiced medicine, and hence is likely to take the popular or lay view of a matter of this kind. If we may be permitted to differ from such a favorite of the gods as Dr. Wiley, we offer a few suggestions why prescriptions should still continue to be written in Latin.

Latin is a dead language, and therefore its words are fixed in meaning for all time. Not so the English and other modern tongues, whose vocabulary is constantly changing in import, so that words may come to have precisely the opposite signification which they originally held, as in the word *prevent*, which archaically signifies to "anticipate with care or attention," that is, not to prevent, but to provide. The modern German "*schlecht*" (bad) once meant good, right, straight.

The world over, the rudiments of Latin are familiar to nearly all Aryan professional men; so that while the German who comes to America may say, "Go the stairs up," and the pious Frenchman, uncertain of the verbal distinctions in English, may in a moment of peril, pray: "Lord, preserve me and pickle me too"—yet these men from Europe as a rule know the fundamentals of Latin much better than do we Americans.

To write the common names of many medicines would only lead to "confusion worse confounded." For instance, "poke root" means not only *phytolacca decandra*, but also the deadly *hellebore*, *veratrum viride*. Of "snake root" there are at least a dozen varieties. A physician recently prescribed "salt of lemon," meaning citric acid. The druggist furnished binoxalate of potassium (commonly termed "salt of sorrel or lemon") to the patient, who speedily died.

Finally, ignorance of the patient as to what medicine he is taking often inures to his benefit. Many persons "cannot take calomel" at all, at all, but

experience no difficulty whatever with hydrargyrum chloridum mite. Numerous physicians have found "tinctura

thebaica" or "tinctura meconii" a useful substitute for laudanum or tincture of opium.

PERSONALS

By the Editor and Associate Editors.

Dr. Wiley Jones has returned from a trip East.

Dr. L. E. Stanton of Sterling has been quite seriously ill.

Dr. R. E. Morris of Longmont is visiting his uncle in St. Paul.

Dr. A. E. Smith has moved his offices into the Commonwealth building.

Dr. Kennedy, of Yampa, Colo., spent several days in Denver last month.

Dr. and Mrs. John M. Foster have arrived home from a voyage to Honolulu.

Mr. R. Albi, who has been visiting in Spokane, Wash., has returned to Denver.

Dr. A. H. Williams is spending a month's vacation in the Panama Canal zone.

Dr. and Mrs. L. Freeman have returned from a visit in Corpus Christi, Texas.

Dr. P. F. Gildea of Colorado Springs is regaining health and strength in Los Angeles.

For the first time on record, every office in the Metropolitan Building is now occupied.

Dr. Charles H. Stough, formerly of Colorado Springs, is now located in the Mack block.

Dr. Arnold S. Taussig spent a week last month with friends and relatives in St. Louis.

Drs. Scott and Edwin Williams have opened offices in the Academy of Science building.

Mrs. Ann E. Higgins, mother of Dr. J. W. Higgins of Denver, died at a ripe old age, Feb. 13th.

Dr. W. S. Hartt, who practiced surgery in Denver a few years ago, died recently in Seattle, Wash.

Dr. H. S. Shafer and family have removed to their handsome new residence at 315 So. Downing Street.

Dr. Bon O. Adams and son visited Panama, Havana, Boston, New York and Chicago last month.

Dr. Charles D. Spivak has made a good recovery after an appendectomy performed by Dr. O. M. Shere.

A little more than \$500 was realized from the performance given recently for the benefit of the Craig Colony.

Dr. James A. Maggard of Pueblo was seriously injured a fortnight ago, being run down by an automobile.

Dr. E. L. McKinnie, former county physician of El Paso county, died in Los Angeles, Feb. 13, at the age of 64.

Dr. and Mrs. H. G. Wetherill are visiting friends in California. They will return to Denver by the middle of April.

Dr. C. G. Parsons read a paper on gas-

oxygen anesthesia at the recent mid-winter clinic of the local dental society.

Dr. Edward W. Lazell is being favorably and prominently mentioned for the superintendency of the state insane asylum.

The city fathers of Boulder are taking definite steps towards the erection of a detention hospital for contagious diseases.

Dr. M. E. Preston was appointed a delegate to the American Medical College Association, which convened in Chicago Feb. 24.

Dr. Lawrence L. Patterson has enlarged his X-ray plant by taking some extra rooms in the basement of the Metropolitan Building.

Mrs. Alice Hopkins, wife of Dr. David Hopkins, a well known Denver dentist, was burned to death in a Kansas City sanatorium, Feb. 3.

Dr. J. E. Dale of Fort Collins had the misfortune to sustain a fracture at the right wrist last month while cranking his automobile.

Mrs. Sarah E. Fugard, a pioneer of Pueblo and mother of Dr. A. L. Fugard, died at her home in Los Angeles, Feb. 16, at the age of 77 years.

Dr. E. E. Kennedy of Basalt has been doing good work in the state legislature as chairman of the house committee upon medical affairs.

Mr. Rex B. Yeager, well known to Denver & Gross men, has opened a new undertaking establishment at the corner of Eleventh Avenue and Broadway.

We are glad to state that Mrs. Earley, wife of Dr. A. H. Earley, has made a good recovery from a chronic complaint, following an operation by Dr. A. H. Williams.

Dr. Edward Delehanty exhibited an unusual case of functional blepharospasm of twelve years duration before the February meeting of the Denver Medical Club.

The annual convention of the Federation of State Medical Boards was held at the Congress Hotel, Chicago, Feb. 25, Dr. Arthur B. Brown of New Orleans in the chair.

Dr. R. Albi, who has been visiting in Spokane, has opened offices in the Academy of Medicine that a contract was signed on February 21, paratus for use in the physiology laboratory.

After eighteen months' exceptionally valuable experience in the Nebraska State Insane Asylum at Ingleside, Dr. H. G. Maul has returned to Denver. He will devote himself particularly to pathology.

Dr. A. Bourquin, French consul for the Rocky Mountain region, has returned to Denver from a pleasant sojourn in Switzer-

land, France and other Mediterranean countries.

Dr. J. M. Perkins spoke at the February meeting of the Denver Medical Club of the gratifying results obtained from ablation of the tonsils in a series of cases of old diphtheria carriers.

Dr. H. G. Wetherill gave an interesting talk in Dr. Utter's pulpit on the evening of Feb. 2nd. His text was, "How Health, Wealth and Happiness Are Promoted by Modern Medical Science."

According to the city bacteriologist, Dr. Wm. C. Mitchell, only eight diphtheria quarantine cards for the city of Denver were up on Feb. 9th—the least number in his experience of sixteen years.

Dr. Arnold Stedman was the guest of honor at a luncheon to twenty-five physicians given at the University Club, February 22, by Dr. Chas. A. Powers, in remembrance of Dr. Stedman's 74th birthday.

At the February meeting of the Denver Clinical and Pathological Society, Dr. Henry Sewall related some amusing and interesting semimedical observations which he had made in a recent trip to the Panama zone.

Dr. Benjamin H. Matthews and Miss Anna Lyman were wedded last week, and will make their home at 2342 Elm street. That no antibodies may ever develop to mar their connubial happiness is the wish of many friends.

Mr. Almon E. Hart, well known to the members of the Colorado State Medical Society, died Feb. 12, at Palm Springs, Cal., after a sickness lasting six or eight months. He leaves a widow and daughter, to whose welfare he was devoted.

The Colorado Oto-Laryngological Society held its January meeting in Dr. Carmody's office, and the next meeting (Feb. 22) in the office of Dr. E. W. Collins. This progressive organization is three years old and now numbers 24 members.

Mr. Theodore Hardee has been appointed chief of the liberal arts department of the Panama-Pacific International Exposition. Surgical and sanitary instruments and methods will be represented to an extent equaled at no former world's fair.

Dr. J. W. Ames gave an interesting stereopticon lecture upon "Personal Hygiene in the Tropics" before the senior class of Denver University and the junior and senior classes of the Colorado School of Mines in the last week of February.

Drs. C. C. Tiffin and E. J. Rhoades, graduates in 1911 of the medical department of the state university of Colorado, recently received the highest marks among 29 applicants who were granted certificates by the state medical examining board of Washington.

Dr. Arnold S. Taussig read a thoughtful and interesting paper upon "Philosophy and Medicine" before the Denver Philosophical Society on the evening of Jan. 20th. The address was well received and was ably dis-

cussed by Drs. Jackson, Beggs and Wm. H. Crisp.

Dr. L. B. Lockard and Dr. T. E. Carmody each presented before the February meeting of the Denver Clinical and Pathological Society a case of hyperkeratosis—the former of the throat (white patches of *oidium albicans*); the latter of the tongue (black tongue).

Dr. O. S. Fowler announces that he will offer private personal courses upon operative surgery upon the cadaver, local anesthesia in minor and major surgery, and the use of the cystoscope and accessories in diagnosis and treatment. Dr. Fowler is thoroughly equipped to "deliver the goods."

The Denver & Gross College of Medicine, through its board of trustees, has wound up its affairs by bequeathing about \$4,100 to the library of the Medical Society of the City and County of Denver, making a total endowment fund from this source of \$10,800. A splendid gift most worthily bestowed!

We are pleased to note that the individual whose life was saved through an operation by Dr. Frank McCartney, and who recently brought suit against the doctor for malpractice, had his case thrown out of court by Judge Denison and was compelled to pay all court costs as well as his attorney's fees.

Dr. W. A. Evans, former health commissioner of Chicago, addressed the Denver County Medical Society at luncheon at the Shirley, Feb. 24th. Dr. Evans is a fluent and forceful speaker and (although a former "hand picked" president of the Chicago Medical Society) is an earnest advocate of medical democracy.

The twenty-fifth annual meeting of the Medical Society of the Missouri Valley will be held at the Coates House in Kansas City, Mo., March 20-21, 1913. A series of interesting symposia is being arranged upon cancer, rheumatism, the colon, and genital tuberculosis in the female. Dr. H. B. Jennings is president, and Dr. Charles Wood Fassett is secretary of the society.

LARIMER COUNTY MEDICAL SOCIETY, ANNUAL BANQUET FEB. 5TH, 1913.

The regular annual banquet of the Larimer County Medical Society was held in Northern Hotel. It was attended by Drs. E. J. A. Rogers, I. B. Perkins and Robert Levy of Denver and Gillaspie of Boulder, guests of the society and speakers at the banquet, and the medical profession of Larimer county; every physician in the county so far as known to secretary was invited to be present and sent a program of the meeting. The doctors connected with the veterinary college of the state agricultural college were also invited and four were present.

The following sat down to the banquet: Drs. Levy, Gillaspie, Whitehouse, Hoel, Quick, Carey, Taylor, McHugh, Atkinson, Rogers, Barnes, Kingman, Newsome, Badler, Cramer, Joslyn, McFadden, Kickland, and

Stuver. Dr. Perkins, who was detained, came on a late train and joined us at the beginning of the program. Dr. Stuver acted as toastmaster. In the absence of Dr. Hoel, who had been called out to attend a case, Dr. McHugh responded to the toast, "The County Medical Society." He called attention to the importance of the county society as an integral part of the great medical organization and then discussed the best method of arousing interest in the work of our local society. In the absence of Dr. Hughes of Weld county, Dr. E. J. A. Rogers of Denver was next called upon. He spoke on the importance of psychotherapy and suggestive therapeutics in the practice of medicine, surgery, indeed in all fields of the healing art. He took as his text, "The General Practitioner and His Obligations to his Clients," and very clearly and cogently showed that by neglecting the proper use of psychotherapy the physician is neglecting one of his most valuable resources, and not only failing to do the greatest amount of good to his patient, but is permitting this work to be taken up and done by various bodies of sectarians who fatten on his neglect, and the medical profession incurs loss and blame. He pointed out the dynamogenic power of mind and showed how by proper suggestion and calling into action the mental powers of the patient the whole vital activity could be increased and wonderful results be obtained. His address was clear, able and convincing and was very much appreciated by the audience. Dr. Robert Levy spoke on "The Sanitary Laws and Regulations of Moses." He called attention to the fact that while many of the regulations were of a religious character and promulgated for that purpose, still they produced a sanitary result; a large part of his speech was in a lighter vein, calling attention to anecdotes and incidents about the Jewish race; it was in his inimitable style and very highly appreciated by all. Dr. I. B. Perkins spoke on the 'Good of the Order' in the characteristic Perkinese manner; he oscillated between grave and gay and gave a most delightful and at the same time very instructive address. Dr. Gillaspie, of Boulder county society, gave a very interesting talk on the "Men Who Follow Us." He pointed out how medical education and training might be improved in the future and a better rounded and more symmetrical physician be produced. Dr. Hoel, having returned to the room, was called upon and made a few remarks. At the close of the program an informal social conversation was indulged in and many rich and racy stories told. Taken all in all the meeting was very interesting and instructive and the most enjoyable one the society has ever held.

Dr. Stuver, the secretary, presented the following resolution, which was duly seconded and unanimously adopted:

Whereas, The Panama Canal Zone was

formerly the home of pestilence, disease and death, and almost uninhabitable by white men; and,

Whereas, By his executive ability, administrative skill and great knowledge of diseases and how to control them, one man has banished pestilential diseases, converted the canal zone into a healthful place and made possible the successful execution of the greatest engineering project in the world's history; be it therefore

Resolved, That the Larimer County Medical Society, in regular meeting assembled, does hereby suggest and recommend that Col. Wm. C. Gorgas be placed at the head of the proposed National Department of Health, and that we urgently request the President of the United States to appoint him secretary of Health and a member of his Cabinet.

E. STUVER,
Secretary.

LARIMER COUNTY MEDICAL SOCIETY, ANNUAL BANQUET FEB. 5, 1913.

Dr. E. Stuver, Toastmaster.

1. This is an age of organization and combination. We have oil, steel, money, sugar, wool, whiskey and other kinds of trusts to collect the earnings of our people and keep them in a properly humble frame of mind. On the other hand we have a great medical organization, which is earnestly striving to prevent or stamp out diseases regardless of the fact that success means lowering the income or even taking away the livelihood of its members. The strength, vitality and results of the great organization which is carrying on this warfare against disease and death, depend, in a large measure, upon the healthy activity of its constituent parts. Dr. Hoel, the president of our society, will tell you something about "The County Society."

2. We have with us from our sister city, Denver, a gentleman who for a good many years has been assisting in shaking the surgical plum tree. Judging from the annals of the case and his prosperous and vigorous appearance, I infer that his efforts have been eminently satisfactory. As he is a jolly good fellow, however, and a believer in the "square deal," I feel sure that Dr. Perkins will take us into his confidence and show us how to share his success. He will address us on "The Good of The Order."

3. The next speaker on our program is a gentleman from a rich and prosperous portion of the state where they raise wonderful sugar beets and celebrated potatoes; where they train school teachers and detain crooked politicians, and accomplish many other worthy things. Breathing the air of such an environment. I know that our brother from Greeley will be the dispenser of sweetness and light, and it affords me much pleasure to introduce Dr. Hughes, who will now address you.

4. "Has there any old fellow got mixed with the boys?

If he has, taken him out, without making a noise,

Hang the Almanac's cheat and the Catalogues' spite!

Old time is a liar. We're twenty to-night!"

Of course we are twenty, and while we are all young and full of vigor, enthusiasm and high ideals, still there is with us to-night one of the "Boys," who by his persistent industry and wide, rich and varied experience has garnered up many things of great value to his profession and will now make us the sharers of his riches. Dr. E. J. A. Rogers will address us on "The General Practitioner and His Obligations to His Clients."

5. We moderns are prone to magnify our own achievements and to belittle or forget what has been done by those who have gone before us. We boast, and that too with good reason, of the wonderful progress we have made in the science and practice of medicine, preventive medicine and sanitary science, but we should not forget that one of the greatest sanitarians that the world has ever seen lived more than 3000 years ago. As a proof of the scientific accuracy of the health laws he promulgated we need only point to the great physical and mental powers of that wonderful race which so faithfully obeyed his precepts and which as a result has passed through all the vicissitudes and persecutions of thousands of years and emerged strong and triumphant. It affords me great pleasure to be able to introduce to you Dr. Robert Levy, who will address us on "The Sanitary Laws and Regulations of Moses."

6. Hippocrates, Galen, Harvey, Jenner, Lister, Pasteur, Koch, Rush, Gross, and many others stand out as mountain peaks from which we can mark the progress made

by medicine in the past. We have with us a brother physician from a neighboring city who will draw aside the veil of the future and give us a glimpse of "The Men Who Follow Us." Dr. Gillaspie of Boulder will now address us.

I WONDER WHY

It is a sin and a shame for independent medical journals to advertise products not sanctioned by the Council of Pharmacy and Chemistry, when (according to the secretary of said Council) only four of the twenty-six state medical association journals do not advertise the same unsanctified products.

It is a crime for independent medical journals to carry the advertisement, let us say, of papine, when the same advertisement is carried in Saint Simmons' old journal, now the official organ of the Nebraska and Wyoming state medical societies.

Our friends the enemy feel it incumbent upon themselves to try to run our business as well as their own.

So many medical men are so much inclined to follow blindly the blatant leadership of self-constituted authorities.

We read and hear so much about the Wassermann test for syphilis, while (according to Dr. Sanford, the Mayos' bacteriologist), "It is safe to say that there are very few men, in this country at least, who are following exactly, through all its cumbersome steps, the method of Wasserman, Neisser and Bruck."

Certain teachers in sundry abeflexnerized medical schools are called "full time" professors, when they seem to have ample time for other profitable private and public work, even to the extent of drawing two full salaries (directly and indirectly) from the State.

KINDERWANTONO.

BOOKS

A Practical Treatise on Fractures and Dislocations. By Lewis A. Stimson, B. A., M. D., LL. D. (Yale); Professor of Surgery in Cornell University Medical College, New York; Consulting Surgeon to the New York, Bellevue, St. John and Christ's Hospitals; Corresponding Member of the Societe De Chirurgie of Paris. Seventh edition, revised and enlarged, with 459 illustrations and 39 monotypes. Cloth, \$5.00 net. Lea & Febiger, New York and Philadelphia, 1912.

In the revised and enlarged seventh edition of this work, by the dean on fractures and dislocations in America, the clear and lucid style of the writer is in evidence to a greater degree even than in previous editions. The work is complete, covering the subjects of fractures and dislocations, yet brief, by virtue of the leaving out of non-essentials. The histo-physiologic process of

repair of fractures represents the latest accepted views on this subject, so necessary to the intelligent understanding of the factors involved in the union and ultimate outcome of cases, as well as the treatment. The writer is conservative on the subject of operative treatment of recent fractures, except that of the patella, with a report of 250 cases without an untoward result. He also advises operative treatment in fracture of olecranon, the apophyses and tuberosities, where there is a constant tendency to displacement by the attached muscles.

The reviewer feels timid in criticising this high authority. The only criticism that could be made is in the treatment of Colles' fracture with long anterior and short posterior splint. While the dressing in the author's skilled hands no doubt gives satisfaction, if the less skilled do not keep

the hand fully extended, by a bandage two inches in diameter in the palm, the corpus will raise the splint from the lower fragments and the result will be displacement. The reviewer prefers a short anterior and long posterior padded, so as to make the surface next to the skin convex and firm, thereby preventing pressure on the radial and ulnar vessels, also spreading the bone and preventing the radius and ulna from uniting with each other. In Colles' fracture this spreading is prevented by applying a pad against the side of the ulna. In treating recurrent outward dislocation of the patella, mention is not made of the approved procedure of splitting the ligamentum patellae and bringing the right half under the left and fastening it to the outer head of the tibia. Aside from this there is nothing to criticise in this splendid work, representing the latest discoveries and most advanced methods of treatment in these important fields of surgery. It is a work for the student, general practitioner and surgeon.

J. L.

Spondylotherapy.—Physiotherapy of the Spine Based on a Study of Clinical Physiology. By Albert Abrams, A. M., M. D., F. R. M. S.; Consulting Physician to the Mount Zion and French Hospitals, San Francisco; Formerly Professor of Pathology and Director of the Medical Clinic, Cooper Medical College, San Francisco. Third edition, enlarged. Price, \$5.00. Philopolis Press, 406 Lincoln Bldg., San Francisco.

To Abrams belongs the great credit of placing spondylology and spondylotherapy upon a scientific basis, and of originating practical and successful methods along this line. That osteopaths and chiropractors do in a certain small proportion of cases achieve satisfactory results where medical treatment has failed, is a familiar fact to every general practitioner of wide experience. That the scientific physician, knowing the spinal reflexes in addition to his former stock of knowledge, and applying these facts rationally, will in selected cases, get better results than any practitioner of exclusive methods, can hardly be doubted. The present volume, thoroughly revised and handsomely printed and illustrated, furnishes the medical man who wishes to avail himself of whatever methods may cure his patients, a reliable guide to spinal therapeutics in full detail, with the reasons for every step. In the preface to this third edition, Dr. Abrams gives the retort courteous to the supercilious would-make-believe-to-know-it-all of the A. M. A. The methods advocated are worthy the earnest attention of every progressive physician.

Primary Studies for Nurses.—A Text-Book for First Year Pupil Nurses. 12 mo of 437 pages, illustrated. Cloth, \$1.75, net.

Clinical Studies for Nurses.—For Second and Third Year Pupil Nurses. By Charlotte A. Aikens, formerly Superintendent of Columbia Hospital, Pittsburg, and of Iowa Methodist Hospital, Des Moines. Second Edition, Thoroughly Revised. 12 mo of 569 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, \$2.00, net.

Every physician who has attempted to lecture to nurses has had more or less difficulty in deciding just how much of the particular subject under consideration should be taught them. The author suggests as an aid to the solving of this problem, the question, "Will this point ever be likely to be helpful to a nurse?"

In reviewing these invaluable books, one is impressed with the splendid judgment, evidently born of a very varied and extensive experience, displayed in answering this question. As a necessary result these books become helpful not only to nurses in training, but also to teachers of nurses as well, including, of course, superintendents of nursing schools. In these two books, *Primary Studies For Nurses* and *Clinical Studies For Nurses*, the author has very skillfully graded the subjects taught so as not to overburden the nurses with information concerning those subjects before they are prepared for the same. Thus, in *Primary Studies For Nurses*, sections on Anatomy, Physiology, Hygiene, Bacteriology, Therapeutics and Materia Medica, Dietetics and Invalid Cookery are given, while in *Clinical Studies for Nurses*, sections on Studies in Diseases and Medical Nursing, Obstetrics, Gynecology, and Diseases of Children, Surgical Nursing, Physical Therapeutics, Massage, Nursing in Nervous and Mental Diseases are fully covered.

In addition, in each book there are questions for Self Examination and Review, and a very complete index very helpful for quick reference.

F. P. G.

Golden Rules of Surgery—Vol. I, of the *Golden Rule Series*.—Especially intended for students, general practitioners, and beginners in surgery. By Augustus Charles Bernays, A. M., M. D., F. R. C. S., Eng., Life Member of the German Society for Surgeons of Berlin, Chief Surgeon Lutheran Hospital and for twenty years Professor of Anatomy and Surgery, St. Louis. Second Edition, revised and rewritten by William Thomas Coughlin, M. D., Asst. Prof. of Surgery, Chief of Clinic, St. Louis University Medical School, St. Louis. 280 pages. Octavo. C. V. Mosby Co., St. Louis. Price, \$2.25.

The entire absorption of a large first edition of the *Golden Rules of Surgery* made necessary the issue of the present one. Its enlargement and elaboration by the junior author has made it possible to cover the entire field of surgery in a thorough and systematic manner, at the same time preserving the character and charming style

that made the first edition of this book popular. One is surprised to find cardinal principles enunciated in a sentence, which in ordinary text books and systems can only be found after carefully dissecting page upon page. How easy it is to forget facts is impressed upon one after reading this volume over and over again. It can be truthfully asserted that to read this little volume over and over will so acquaint one with the fundamental truths of surgery that a view-point of this science and art will be obtained that will redound greatly to the credit of the reader. The publishers announce that other volumes in this series will follow rapidly—on gynecology, diagnosis and treatment, pediatrics and obstetrics.

Psychoanalysis: Its Theories and Practical Application. By A. A. Brill, Ph. B., M. D. Chief of the Neurological Department of the Bronx Hospital and Dispensary; Clinical Assistant in Psychiatry and Neurology at Columbia University Medical School. Octavo of 337 pages. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, \$3.00, net.

After six years of hard work in psychoanalysis in the neurologic department of the Vanderbilt Clinic, and elsewhere, the author is amply qualified to write this very readable presentation of his experiences with what has been termed Freud's "mental catharsis." He estimates that about 25 per cent (hysteria, neurasthenia, psychasthenia, and mild forms of the functional psychoses) of neurotics lie in this hitherto etiologically neglected borderline class of cases, in which the sexual element is translated from dreams, where primitive instincts, repressed into unconsciousness, come into fulfillment. That many lapses, particularly the forgetting of persons' names, depend upon a hidden antipathy or a desire to consign painful associations to oblivion, can hardly be true in all cases, as witness Swinburne's lines:

"If she has forgotten my kisses,
I have forgotten her name."

Nevertheless the book is not only as entertaining as a record of travels into new lands, but for the doctor who will devote the necessary time it should prove of real value in the management and cure of a considerable number of heretofore despaired of neurotic patients. Not the least interesting chapter is the final analytic exposition of Freud's theory of the nature and origin of wit.

The Surgical Clinics of John B. Murphy, M. D., at Mercy Hospital, Chicago. Volume 1. Number V, October, 1912. Volume 1. Number VI, December, 1912. Published Bi-Monthly by W. B. Saunders Company, Philadelphia and London.

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In reviewing No. I of these clinics, the reviewer stated that the numbers would become more valuable as more were published. This is proving to be true. It is also being recognized by practising surgeons. In medical meetings one hears "The Murphy Clinics" quoted more and more as their real worth is becoming known.

The various sections on bone and joint work has stimulated a new effort in cases previously regarded as hopeless.

Not only is technic given in detail, but as a guide in differential surgical diagnosis the clinics are invaluable. There is not a day that one does not have occasion to think of some valuable suggestion received from a study of the clinics.

The index published for Volume I is not sufficiently complete. One forgets exactly where he saw a certain statement and an index is supposed to serve as a guide in such a search. The present index is too small.

The great value of reading every word and a careful study of most of these sections can not be overstated. This value is not

alone to the surgeon, but to the general practitioner for the points in diagnosis.

F. C. B.

Surgery and Diseases of the Mouth and Jaws.—A practical treatise on the surgery and diseases of the mouth and allied structures, by Vilray Papin Blair, A. M., M. D., Professor of Oral Surgery in the Washington University Dental School, and Associate in Surgery in the Washington University Medical School. With 384 illustrations. St. Louis. C. V. Mosby Company, 1912.

This is a book of 638 pages, with 384 illustrations. It is well written, bound well, contains a good bibliography and has a very excellent index. It is a very complete text book on the Surgery and Diseases of the mouth and jaws.

Some chapters, as in most text books, are not of any especial value to the practising surgeon; viz. Chapter III, on Preparation of the Surgeon's Hands, Instruments, Sterilization of Rubber Gloves, etc. If a man owned but one book, such chapters would be valuable; but such chapters for most practitioners are valuable only for the sake of completeness. Much of the book represents personal experience and it is told in a very entertaining and instructive manner.

The chapters on Cleft Palate are especially praiseworthy. The sections on tumors are also exceptionally fine, particularly Tumors of the Tongue and Cancer of the Tongue.

The book is absolutely complete—even very rare affections like Mikulicz's Disease are treated. It is a very valuable addition to the library of every man doing general surgery.

F. C. B.

Medical Men and the Law.—A Modern Treatise on the Legal Rights, Duties and Liabilities of Physicians and Surgeons. By Hugh Emmett Culbertson, Esq., member of the Ohio and New York Bars; Contributing Editor to many Legal Publications. Octavo, 325 pages. Cloth. \$3.00, net. Lea & Febiger, Publishers, Philadelphia and New York, 1913.

This book is one which the American medical profession has long needed, giving as it does a succinct account of all the main features of the modern law pertaining to physicians and surgeons. The subject matter is logically arranged, and readily accessible through a good index. Some idea of the nature of the contents may be had from the titles of the twelve chapters of the text: Introductory; Definitions; Who May Practice Medicine and Surgery; Relation of Physician to Patient; Compensation; Malpractice or Negligence; Criminal Liability of Physicians and Surgeons; Exemptions of Physicians and Surgeons; Physicians and Surgeons as Witnesses; Right to Protect Professional Reputation; Validity of Contract Restricting Exercise of Profession; Wills. The legal value of the citations is enhanced by the foot note references to

cases in point. The most frequent use to which this volume will be put by its possessors will be in looking up every now and then the law upon particular matters of dispute of personal interest at the time.

E. C. H.

The Mulford Digest.—This progressive periodical, edited by Dr. George M. Gould and devoted to serum and vaccine therapy, immunization and drug standardization, represents the highest type of a scientific trade-journal, and comprises a careful and impartial digest of all the recent literature upon the subjects mentioned. It will be sent to physicians regularly upon request.

A NEW WORK ON THE HISTORY OF MEDICINE.

W. B. Saunders Company, publishers, of Philadelphia and London, have in active preparation a work on the History of Medicine by Dr. Fielding H. Garrison, Principal Assistant Librarian, Surgeon-General's Office, and Editor of the Index Medicus. Dr. Garrison's twenty years' experience in medical bibliography, and the unusual advantages derived from his close touch with the rich stores of the Surgeon-General's Office, fit him most admirably for such a work as this.

His book will present the history of medicine from the earliest ancient and primitive times; on through Egyptian Medicine, Sumerian and Oriental Medicine, Greek Medicine, The Byzantine Period; the Mohammedan and Jewish Periods, the Mediaeval Period, the Period of the Renaissance, the Revival of Learning and the Reformation; the Seventeenth Century (The Age of Individual Scientific Endeavor), The Eighteenth Century (The Age of Theories and Systems), the Nineteenth Century (The beginning of Organized Advancement of Science), the Twentieth Century (The beginning of Organized Preventive Medicine). There will also be Appendices covering Medical Chronology, Histories of Important Diseases, Histories of Drugs and Therapeutic Procedures, Histories of Important Surgical Operations, and Bibliographic Notes for Collateral Reading.

Dr. Garrison's work will undoubtedly be a valuable book to every medical man. In this one volume he will get a complete history of medicine from its earliest times, presented in a concise form.

The illustrations are intended to stimulate the reader's interest in the picturesque aspects of medicine and in the personalities of its great leaders. The biographies will be confined to the most important facts and to interesting personal traits. The original bibliographic references to the important discoveries, operations and experiments will be given. Each period is to be followed by a brief survey of its social and cultural phases. Altogether it promises to be a most important addition to medical literature. We await its publication with much interest.

Utah Medical Journal

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DRUGLESS HEALERS AND THEIR PROPOSED LICENSING BOARD.

Drugless Healers were before the Utah Senate Committee on the 20th of February in support of their bill. One of this band told the committee that there were between thirty-six and forty practitioners of these schools in the state. Attorney Charles E. Marks was their principal spokesman. Dr. Clarence Snow of the state board of medical examiners and some physicians and osteopaths also were present.

Principal discussion before the committee was on the educational requisites of healing and medicinal practice in the state. For the regular doctors and osteopaths it was pointed out that they were obliged to study at least four years before they were allowed to practice.

Attorney Marks, speaking for the drugless healers, said that the public nowadays demanded the latest things. He said it didn't matter how much education a man had, the question was whether he could deliver the goods. A man doesn't need a diploma to man a pick and shovel, he declared, and need

not have studied Greek to administer a massage properly. He urged the committee to report favorably on the bill. He chided the osteopaths for their opposition to admission of the drugless family, recalling their struggles for recognition.

A man in the rear of the drugless section of the chamber then arose. He charged that the followers of medicine and surgery were loth to admit any new idea to their practice. He said a college education was not necessary to practice drugless healing and that many such healers outrivald their learned rivals in success.

Dr. Snow said he didn't care whether the bill was passed or not and would not have come had not a patient urged him to do so, and he came as a citizen rather than a doctor. "From the discussion I have heard here," he concluded, "there seems to prevail an idea that ignorance is the greatest requisite in the practice of any science."

What steps have the State Medical Association of Utah, the State Medical Council and the Legislative Committee of the State Association taken to expose

the absurd pretensions of these ignorant charlatans? The State Association represents the medical profession of Utah, but where were those who had been appointed to act for them in this and other important matters? A member of the Legislative Committee requested the secretary, Dr. W. Brown Ewing, to call a meeting of the committee to consider the proposed "Drugless" Bill with a view to combined action—but, the secretary refused to call such meeting and as a result Dr. Snow, a member of the board of examiners, attended "as a citizen rather than a doctor," and no official officer of the State Association raised his official voice in protest. We regret that Dr. Smedley, the active member of the medical council, has been unable through sickness to urge the council to action, and that the recent railroad accident to Dr. J. E. Morton has deprived the Legislative Committee of its active member. It looks as though the secretary does not want to be troubled with medical legislation—or matters outside of the usual routine.

THE MEDICAL ASSOCIATION'S OFFICIAL ORGAN—BETTER LATE THAN NEVER.

Northwest Medicine, the so-called official organ of the Utah Medical Association, should secure an up-to-date Salt Lake editor, if it desires to record official facts as they occur. The organ has at last in its February issue, page 10, announced to the members of the association the fact that Dr. A. J. Hosmer is its president. We informed our readers of that fact in our October issue, following Dr. Hosmer's induction into that office in the previous month of September. Even in this belated announcement, however, our contemporary has been led into error by its Salt Lake correspondent. The next meeting will not be held in Ogden as stated by the official organ. **Salt Lake City** was decided upon last September

for the next annual meeting. The few members of the Association who rely upon the official organ for information in respect of medical doings in Utah will no doubt be obliged to our readers, who may bring this correction to their notice, inasmuch as they may be making arrangements to be absent in Ogden on the 23rd and 24th of September, the days named for the next annual meeting. The meeting will be in Salt Lake City—and not in Ogden. We suggest the "official organ, etc."—correct its error—before it is too late to be of service to its readers.

THE DOCTOR AND THE LAWYER.

The Hon Henry J. Booth of Columbus, Ohio, in an address before the Association of Surgeons of the Norfolk and Western Railway Co., said: "No other professions are so closely associated as ours. The frequency with which they must seek each other's assistance would be amazing to the general public if the facts were more fully known. Upon this subject the dockets of our courts speak eloquently and conclusively." Referring to legal cases resting mainly on the claim of traumatic neurosis—he said:

"Osteopaths do far more to remove such cases from the domain of 'the vague, the mysterious and the obscure,' and bring them into the light of real scientific diagnosis and treatment than the old-line physicians themselves. Hence, lawyers who defend, charged frequently with attempting to thwart justice, naturally anticipate some astounding disclosures when an osteopath takes the witness stand, for, with their thorough and comprehensive knowledge of anatomy acquired outside of the class-room, the dissecting-room and the hospital, and their deftness of touch and a skill in diagnosis but little short of the miraculous, they find the causes of symptoms which puzzle you, in nerves gone astray, contracted mus-

cles, dislocations never suspected even by the patient, and *mirabile dictu*, the most conclusive evidence of large and prominent nodules resulting from numerous fractures anywhere near the supposed seat of the injury of which an X-ray examination furnishes no evidence at all.

Our professions are alike in still another very important respect. It is claimed that we are so ultra conservative and so bound by the toils of precedent as to thwart the legitimate demands of enlightened progress. And they say of yours that it seeks a monopoly of the healing art. So you have arrayed against you, directly or indirectly, the adherents of the Pratt school, whose curriculum requires an attendance of but one week, the clairvoyants who delude the credulous clandestinely or by sufferance, the Christian scientists, whose status in the practice is not yet fixed because it is claimed that they do not practice medicine, and the osteopaths, who have acquired by statute a limited status in Ohio and in several other states. With these new cults and others like them your profession is *persona non grata*, because you insist that knowledge should be a condition of the right to practice."

Dealing with conditions in Congress he adds:

"Our annual reports are replete with valuable suggestions which have been ignored. Lack of time will permit the mention of but one instance of hundreds that might be cited. When the Titanic disaster occurred no suit could be maintained in the United States admiralty courts for the death of a human being. Hence there was no redress for that appalling loss of life. When this was discovered by the public, the lawyers were condemned as usual. How often they have attempted to remedy this grave defect in our remedial law I do not know. But it is a matter of record that nearly three years ago the

American Bar Association during its session at Detroit recommended such a law, that the bill was afterwards introduced in Congress, that it died of inanition in a pigeon-hole, and that it was not even deemed worthy of an autopsy until the subject was taken up again at the annual meeting of the Maritime Law Association in New York on the third of last month."

So too Public Health Bills the outcome of Medical Science introduced into Congress during the past six years have all been talked to death or died of inanition.

ON "THOROUGH EXAMINATIONS" AND LEARNED "PATIENTS."

The patient who demands a "thorough examination" usually impresses us as a bumptious character and gives us a moment's amusement. But properly regarded the demand—or request—is really the best of the compliments we occasionally receive, and the most subtle. For by implication our capabilities are rated very high. Think for a moment what a "thorough examination" would be, were it ever carried out. To be sure no man could make such an examination, but the patient who is desirous of having himself well looked over compliments the man whom he selects most highly—far more highly than he suspects for he cannot know what a "thorough examination" really means. Doubtless part of our amusement in the foregoing situation is derived from our realization of the lay applicant's scant conception of the real significance of his request, or demand, and our knowledge that it is an order that is never, and, in the nature of things, never can be, filled.

Nevertheless, the thoroughly up-to-date pseudo-neurasthenic "patient" who is addicted to medical consultations expects to have his hemoglobin color index determined, his urea output estimated, his urine tested for indi-

can, and his retina inspected. Some of these gentry have an astounding knowledge of medical literature and techniques and one must either overrule them at all points through sheer superiority of knowledge or else bamboozle them, one of the most pleasant diversions of the harassed medical man. We need not particularize, for every reader knows exactly what we mean. These people are usually not patients, properly speaking, and we are violating no canon of ethics in regarding them as entertainers.

Perhaps our title should have been: "IN THE CONFESSIONAL."—*Medical Times*—Dec., 1912.

TREATMENT OF CONSTIPATION BY GELOSE.

From the classical researches of Schmidt, it appears that the causes of chronic constipation may be classified as follows: (1) By a too complete digestion and intestinal absorption, from which results an insufficiency of volume and dehydration of the residue, giving rise to desiccation and hardness of fecal matter; (2) by an arrest in the normal intestinal fermentation due to the insufficient hydration of the intestinal residues.

A Priori; laxatives should fulfill the following requirements: (1) Increase the volume of the feces and hydrate them; (2) reestablish such normal intestinal fermentation as will maintain peristalsis.

Schmidt believes that the gelose, or agar-agar, used by bacteriologists, fulfills these condition and constitutes an ideal laxative, and experience proves his theory to be correct. According to Prof. Carnot, gelose has the property of absorbing large quantities of water; it swells out considerably and constitutes a soft unctuous lubricating mass.

Gelose, or agar-agar, absorbs about 15 times its weight of water, and if taken with food, it increases the vol-

ume of feces and keeps them soft in patients who are constipated. It segments the feces and facilitates the intestinal contractions, thus acting as a mechanical excitant of peristalsis, and giving a certain softness to the stools which assists in their evacuation.

Agar-agar gelose is prescribed in various forms in connection with cascara, *Rhamnus frangula* or Bulgarian lactic ferments, and such preparations are largely prescribed throughout Europe with good results.

Agar-agar alone does not act immediately, and it may require three or four days before the effects are noticeable, so that patients must be made to understand this. It is effective in most cases and once its effects are obtained and its use continued daily, there are no unpleasant after-effects. In this connection it may be stated that gelose is obtained from sea weeds, and is known in commerce as agar-agar, largely used in Japan as a part of daily food.

Carnot adds, that while it may not be universally successful, that in two-thirds of his cases of chronic constipation, it was successful.—*Le Progres Medicales*.

NURSES' WORK IN PUBLIC SCHOOLS SATISFACTORY.

The good results of the district nurse inspection work in the public schools, which was inaugurated by the Salt Lake City board of health, is proved conclusively by the weekly report of the nurses issued recently. They inspected twenty-nine schools, practically every one in the city; visited 173 rooms, inspected 351 children personally and refused permits to forty-six ailing children who might otherwise have mingled with their fellow students to the great detriment of health conditions.

Of the children excluded ten were found to be suffering from smallpox, two from measles, three from tonsillitis, five from suspicious symptoms such

as headaches, nausea and stiff neck, nine on account of scabies, two for herpes, four for sore throats, one for suspected typhoid fever, one for whooping cough and nine because the period of exclusion following quarantine had not expired.

Aside from the school work the nurses visited eighteen homes, made eight dressings in injury or other cases, took eight cultures from contagious cases, and performed seven vaccinations.

SMALLPOX—VACCINATION— QUARANTINE.

How many cases of smallpox will there be in Michigan during the next six months? I do not know. I do know that there will not be a case of smallpox in my family, although I may go directly home after having visited virulent cases of the disease. What is more, as far as my family is concerned, no person who is unfortunate enough to have smallpox needs to be quarantined. If a tramp covered with smallpox pustules happens to call at my house, the fact that he has smallpox is of less concern to my family than the fact that he may have itch or even a tapeworm. In securing to my family this protection against smallpox there is no sacrifice of life or limb, and little, if any, inconvenience incurred.

The physicians and health officers who visit smallpox cases do not take all of the precautions so commonly practiced because they are afraid of contracting the disease, or of carrying it home to their families, but to protect the unvaccinated. Physicians who ordinarily charge two dollars for visiting a case of typhoid fever are frequently

paid ten dollars by the county for visiting a case of smallpox. Is this difference in fee because the latter case requires higher degree of skill and knowledge in treatment? Ask the physician. It is based more upon the necessity, on the part of the physician, to do a lot of extra work in order to protect the unvaccinated, which in no way benefits the patient.

An epidemic of smallpox in a locality always brings a big item of expense upon the municipality and the county. Ninety per cent of this expense is incurred, not in the interest of the patient, but to protect the unvaccinated. Would it not be a good plan, when smallpox develops in a town, to quarantine the unvaccinated at their own expense and relieve them from quarantine only after a successful vaccination?

Quarantine regulations effect very little in controlling an epidemic of smallpox. Our Michigan epidemics have been checked only after a very general vaccination of the people in the vicinity has been accomplished.

Some states have abandoned quarantine requirements in relation to smallpox on the ground that it is not effective in preventing or controlling epidemics, and that the expense is far out of all proportion to the good accomplished.

It is our sentiment that the person who contracts typhoid fever as a consequence of drinking city water contaminated with city sewage should be cared for at city expense regardless of his financial rating, and that the person who contracts smallpox as a consequence of neglect or refusal to be vaccinated should have to hustle for his own support.

"THE DIAGNOSIS AND MANAGEMENT OF EPIDEMIC VARIOLA."*

CHARLES S. CALVERLY, M.D.,
President Vermont Board of Health.

The expression "epidemic variola" might possibly lead to the inference that there was a form of variola that was not epidemic. With many of our infectious diseases, a case, or a few cases, in a community are not generally considered an epidemic. A single case, however, of variola may give rise to all the uneasiness and public disturbance of a true epidemic, hence variola must always be considered an epidemic disease, even when we have but a single case in the community.

It is (unfortunately for medical education) impossible to bring cases of these contagious diseases before a class for clinical purposes. The consequence is that most of our medical students graduate without ever having seen a case of smallpox. It probably is true that a majority of the practicing physicians in this state have never had this experience.

Diagnosis.

It is one thing to diagnose a typical case of contagious disease and quite another to diagnose the atypical and mild case. This holds true not only of smallpox, but of most of our contagious diseases. The typical case, which the text books describe, is usually easily and early detected. The walking, atypical case frequently taxes the diagnostic ability of the most experienced.

The history of the mild type of smallpox which has prevailed in this country during the last twelve or thirteen years, is a striking illustration of the truth of the above statements. This disease has been mistaken for chicken-pox, "Cuban itch," and various other diseases, real and fancied, by expert diagnosticians all over this country.

The disease was undoubtedly import-

ed from Cuba soon after the close of hostilities in 1899 and prevailed for some time before it was even suspected of being true variola. It is perhaps not to be wondered at that this was the case, inasmuch as the variola, with which we had been familiar, was a much more severe and fatal type of disease.

This mild type was mild in every particular. The patients were frequently not ill enough to be in bed and the mortality was practically nothing. In the absence of exact knowledge of the etiology of variola, we have no sure test by which we may recognize the disease. The mild cases, often lacking some of the time-honored landmarks of the disease, are especially misleading. The case must usually be viewed from all angles and all possible surrounding circumstances must be considered. The importance of an early and accurate diagnosis in variola is obvious. It is vital to the community as well as the patient.

Symptoms on Which a Diagnosis must Rest.

First. The existence of the disease in a community will, of course, furnish a clue to the diagnosis of suspicious cases.

Second. The incubation period. If it is known that a person has been exposed to variola, the onset of symptoms some eleven or twelve days later would make a diagnosis comparatively clear.

Third. Absence or otherwise of vaccination. In cases of a suspicious eruptive disease, if the patient has a distinct vaccination scar, the chances of the case being one of variola are appre-

*Read at the May meeting of the Burlington and Chittenden County Clinical Society. Reprinted from Vermont Medical Monthly, June, 1912.

ciably diminished. If there are two or three good scars on the individual, the chances of the diagnosis being one of smallpox are correspondingly lessened.

Fourth. Age. Variola does not show a preference for any age. Children, adults and old people are alike susceptible to the disease. The disease for which variola is oftenest mistaken is distinctly a disease of childhood and youth. Cases of chicken-pox after twenty years of age are rather rare and after twenty-five or thirty years so rare as to be considered curiosities.

Hence if a disease is prevailing to any appreciable extent among adults, or is attacking old and young in a community, the strong presumption is that the disease is true smallpox.

Fifth. Initial fever. Even the mild form of the disease of which we are especially speaking at this time has usually distinct symptoms at the start. A case, which subsequently may prove to be very mild, as far as the extent of the eruption and the febrile symptoms are concerned, will have quite pronounced initial symptoms.

The initial fever in smallpox is usually a distinct entity and lasts three days. The subsidence of this fever and the accompanying symptoms are apt to be followed immediately or within a few hours with the appearance of the eruption. Abrupt febrile symptoms occurring especially in a community where there are cases of variola should therefore receive careful attention. The positive diagnosis of smallpox from the initial fever alone is, of course, an impossibility in the absence of exact knowledge of the etiology and pathology of the disease. Cases during this stage of illness are apt to be mistaken for the grippe, rheumatism, hard colds and other vague diseases. The practitioner should be on his guard, if there is reason to think the disease exists anywhere in the neighborhood.

Sixth. Appearance of the eruption. It not infrequently happens that the

initial fever in smallpox subsides and the patient and friends, and occasionally the physician, think the case is well. It has even occurred to some of us that we have discharged such cases as well, only to be summoned a few hours later to explain an eruption.

The eruption of smallpox appears at the termination of the initial fever on the third or fourth day, but there is sometimes an interval of several hours between the termination of the initial fever and the appearance of the eruption.

The eruption usually begins on the forehead and exposed surfaces of the body.

First it is a macule, soon passing into the elevated papule.

Seventh, uniformity in the different stages of the eruption.

The eruption in smallpox in the course of ten or twelve days goes through a regular succession of stages. The papule soon becomes a vesicular and the visicle becomes umbilicated and the serum changes to pus, which in turn dries up and forms the scab. We have then the following distinct stages of eruption, macule, papule, vesicle, pustule and scab.

It is the rule that the eruption should be at the same stage all over the body at the same time, i. e., you should find the body covered with vesicles or with pustules or with scabs. The apparent exceptions to this order of things are due to external influences, especially finger nails and possibly also to vaccination. The eruption is sometimes a little further advanced on the exposed surfaces of the body than on the parts that are later affected. The rule, however, which makes the various stages distinct from each other, enables us to distinguish with greater certainty between this disease and chicken-pox.

Eighth. Greater abundance of the eruption on the head and extremities. The preponderance of the eruption as a rule in this disease is on the head,

neck and extremities, i. e., the eruptive points are most numerous on these surfaces. This is another distinguishing characteristic between smallpox and chicken-pox.

In chicken-pox, as you are aware, the eruption is thickest on the trunk.

Ninth. Secondary fever. The appearance of secondary fever in the mild form of the disease, which we are considering, is exceptional. A small percentage of the cases reach a secondary fever, though this is usually mild, its entire absence is not unusual.

The greater or less abundance of pustules on the body does not seem to measure accurately the amount of secondary fever in this disease. This is especially true of these mild cases, which we now see. A large surface, thickly stuffed with pustules and even occasionally confluent will frequently occur with almost no secondary fever. So many of these cases, however, have a slight eruption and correspondingly few pustules that the absence of secondary fever is not significant in making the diagnosis.

Of course, it is usually to be expected that diagnosis in an individual case will have been made before the stage of secondary fever arrives.

Diseases from Which Smallpox Should Be Differentiated.

First, the grippé. The "initial fever" of this disease simulates very closely the well known symptoms of the grippé. The head and back ache and fever are all characteristic of both diseases. It is not an unusual mistake to make, neither is it remarkable that such a mistake should be made, as to confuse these two diseases. I know of no way in which a sure differentiation can be made. The catarrhal symptoms of the upper air passages are, of course, generally lacking in variola. Given a case of variola, however, in a community, grippy symptoms should be carefully scrutinized.

Second. Measles and scarlet fever. The prodromal rash we occasionally find in variola has some of the characteristics of each of these diseases. It should, however, seldom be difficult to distinguish between these two diseases and variola, on account of the site at which the eruption appears. The rash that might be mistaken for either measles or scarlet fever appears most frequently on the thigh and lower abdomen or on the axilla. And if we remember the site of the appearance of the eruption in measles and scarlet fever, we should make no mistake of this sort. The measles eruption appears about the ears and hair and that of scarlet fever on the chest and back.

Third, impetigo contagioso. It has been said that this skin lesion has occasionally been mistaken for smallpox or vice versa. The fact that impetigo is distinctly a local infection should be remembered in this connection.

Fourth. A pustular syphilide. Pustular syphilide may, of course, in any special case resemble as to the appearance of the individual pustules smallpox pustules. The distribution, however, of the skin lesion, and the failure or otherwise to get a smallpox history should decide the diagnosis of these cases.

Fifth, drug eruption. It is quite conceivable that bromism or iodism might under very exceptional circumstances be mistaken for variola. The points that should be considered in deciding between these should be the clinical history of the case in question together with the presence or otherwise of the disease in the community.

Sixth, chicken-pox. Chicken-pox of severe type may easily be mistaken for the mild form of variola. A mistake of this kind is not at all unusual and has frequently led to serious embarrassment to all concerned.

Variola has prevailed in some of our Vermont communities for weeks and even months under the innocent title of

chicken-pox. The differential diagnosis between these two diseases is of the highest importance and every resource should be exhausted in cases of doubt, inasmuch as so much depends upon the result.

All considerations, social and commercial, as well as the public health, demand that physicians should exercise the greatest care in regard to the differential diagnosis between varicella and variola. The points that are of importance in deciding between these two diseases are:

a. Age. Chicken-pox is essentially a children's disease. The strong presumption is when we meet a case of one of these diseases in an adult that the diagnosis is variola. As I said before, cases of chicken-pox in a person over twenty are occasionally met but over twenty-five or thirty are exceedingly rare.

b. Initial fever. The initial fever in chicken-pox is transitory and seldom lasts more than twenty-four hours, while that of smallpox almost always lasts three days.

c. Appearance of the eruption. The appearance of the eruption in chicken-pox is within twenty-four hours of the beginning of the initial symptoms usually and that of smallpox comes on the third or fourth day.

d. Site and sequence of the eruption. The eruption in chicken-pox begins first and is thickest on the trunk; that of smallpox begins first and is thickest on the head and extremities.

e. Eruptive stages. The smallpox eruption follows a quite uniform and regular series of stages. In the papular stage the eruption is papular all over the body. During the vesicular stage the eruption is vesicular and during the pustular stage, each spot is a pustule.

The eruption in varicella is almost never uniform. We get the papule, vesicle and occasionally a pustule mixed up haphazard on the same surface.

It is occasionally suggested that the eruption in chicken-pox is not found on mucous surfaces and thereby a diagnostic point between these two diseases may sometimes be of value. In my experience this is a mistake as we frequently find the vesicles of chicken-pox on the mucous membranes. The same is also occasionally true of the palms of the hands.

A careful consideration and weighing of the different points suggested should make a diagnosis between these two diseases usually possible. I hesitate to go so far as to say that such a differential diagnosis is invariably possible. This is certainly not the case.

If we consider the clinical picture presented by an individual case, taking this in connection with the extraneous circumstances which may usually be offered in a community, a diagnosis between these two diseases can usually be made with reasonable certainty.

There is one point with reference to the diagnosis of smallpox that we ought not perhaps to wholly pass over and that has to do with the so-called "Shotty feel." This symptom is frequently mentioned in the text-books and we all remember to have heard it in our college days. During the early stage of the eruption, in passing the fingers over the skin and pressing somewhat firmly thereon, small nodular masses were sometimes felt rolling under the finger like shot. I am frequently faced with the statement that a given case under consideration has never presented this shotty feel and in my experience with these mild atypical cases, which are so important to us nowadays, this so-called "shotty feel" is very rarely observed. I have now and then been able to make this out over the flat bones of the skull, but I believe it is not a symptom which should be relied upon in making a diagnosis.

..Management of an Outbreak (Prophylaxis). The prophylaxis of small-

pox is infinitely more important than its curative treatment. This prophylaxis depends upon these propositions.

First. Diagnosis. The identification and accurate diagnosis of the disease in its incipency is of the highest importance and on this depends very largely the success or failure of all prophylactic measures.

Second. After the disease is recognized as smallpox, our first concern should be with those who have been exposed. A careful list should be made by the physician or the health department of all those who have by any possibility been exposed to the sick person. This list should be used by the health authorities to the extent of putting up the bars as far as possible to prevent these exposed persons from unwittingly spreading the infection until after the period of incubation has passed with them.

Third. Vaccination. To the end of effectively controlling the infection in a community, all those who have been exposed to the disease, should be vaccinated. After vaccination, such persons may be allowed their freedom for a week, when they should be seen by a physician daily during the succeeding fortnight.

Varioloid, or smallpox modified by vaccination, may of course produce the true disease by contact, hence, even if the vaccination "takes" in a given individual, that individual may have the modified form of the disease after the regular incubation period.

In any case any exposed persons decline or refuse to be vaccinated, they should always be put under strict quarantine for three weeks. This is to cover the extreme limit of possible incubation.

Fourth. Official notification, isolation and terminal disinfection.

Sanitary regulations everywhere require a notification of smallpox like all other contagious diseases. This notification is made of course to the health

officer. The health officer immediately "gets busy" in rounding up all those who have been exposed to the disease and isolating or quarantining those sick.

Quarantine, or isolation of the case, consists in confining the poison of the disease or the infection, as we call it, within the narrowest possible limits. In case of smallpox outbreaks, the surest and safest way to accomplish this isolation is by means of isolation hospitals. A community that can have every case early moved to an isolation hospital can thereby rid itself of this infection more safely and surely than would be the case, if every case was treated in its own home. In the latter instance, each individual case is a center or focus of infection. When the community has an isolation hospital, it has but a single such center of infection.

The terminal disinfection after smallpox is considered by most authorities as an essential in its prevention. It is not necessary to discuss here the infectiousness of the desquamated scab in this disease, or of the discharges from mucous surfaces. It has always been considered a necessary feature of the prophylaxis of smallpox that the apartments, and especially the apartments occupied by the sick persons, together with the furniture, clothing and other articles should undergo a careful cleansing and disinfection before further occupancy or use.

There is very strong circumstantial evidence in favor of the infectiousness of the desquamated skin and scabs from this disease, but in the absence of exact knowledge of the cause of this disease, it does not behoove us to enter into any serious discussion of the point of exit of the contagion from the human body or the vehicle by which it is conveyed.

A reasonable regard for public safety demands that apartments and things that may be infected, shall be thor-

oughly disinfected before they can do injury to other persons.

On these four propositions depends quite largely the prophylaxis of this disease.

Treatment of the Case. The treatment of smallpox need not detain us. It is purely symptomatic. There is no known specific treatment and can of course be none until we know more of its cause. We may alleviate the febrile symptoms and the discomfort caused by the cutaneous eruption and irritation in the usual manner by baths, lotions and ointments and we may look out for the nose, throat and eyes and we may give our attention to the exhaustion that accompanies the secondary fever in severe cases. There is, however, no specific and nothing which general principles will not cover.

Vaccination. A word in regard to vaccination. I do not need to enter into any defense of vaccination before this audience. Every physician, and I may truthfully say, every reasonable person, who has investigated in an im-

partial way the benefits of this operation to the human race, can never for a moment doubt its prophylactic value in smallpox.

Of vaccination in general I can only say that the German practice of vaccination in infancy, to be repeated about the tenth or twelfth year of life, is probably the best practice and it is regrettable that such a practice cannot become absolutely universal.

In the prevention of smallpox, however, it is effective if practiced within two to three days after exposure to the disease. The prophylactic value of vaccination is probably realized on about the eighth day after it is done. The incubation period of smallpox is usually at least eleven days. Hence a vaccination done three days after exposure should protect the disease; done later than this during the incubation period, we are very apt to get a vaccination sore running its course with the other eruption of the disease. A well vaccinated community can never have smallpox.

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THE ORIGIN AND CONTROL OF MENTAL DEFECTIVENESS.

Dr. Charles B. Davenport in a paper bearing this title says: This brings us to the subject of the control of mental defectiveness. We see at once that there must have been at work, even in prehistoric times, a sort of natural control by the elimination of those incapable of meeting the ever-increasing complexities of "advancing civilization."

As man spread to the north those strains that had not acquired the trait of hoarding for the winter mostly perished of cold and hunger; those strains that had not acquired the sense of property rights and tended to invade the stores of others were always in danger of being cut off. In England, less than a century ago, there were 223 classes of offences punishable by death. Under such rigid selection "defective" ancestral strains tended to be eliminated. . .

..Today, in our most highly civilized countries, the process of elimination of the unfit animal strains is largely reversed.. We protect, in an institution the members of a weak strain up to the period of reproduction and then let them free upon the community and encourage them to leave a large progeny of "feeble-minded;" which, in turn, protected from infantile mortality and carefully nurtured up to the reproductive period, are again set free to reproduce, and so the stupid work goes on of preserving and increasing our socially unfit strains.

But a reaction is setting in. The legislatures of six (now nine), of the United States have already voted to permit the sterilization of defective persons. But it is doubtful if the "more advanced" public is altogether ready for such operations.. A less drastic, but less effective, method is the segregation of the defective strains during the entire reproductive period. However, the method is not so important, but in some way or other society must end these animalistic blood-lines or they will end society.

PRACTICAL EUGENICS.

Many questions are being asked about eugenics and the practical application to the people. A writer in *Eugenics Review*, for March, 1912, p. 306, very aptly answers the queries.

"Every person before marrying should be compelled by law to undergo a private and confidential medical examination. The public has been accustomed for many years past to submit without complaint to examination by doctors when taking out life insurance policies, and the examinations now proposed would not be one whit more irksome. The law might, however, provide that where one party to a proposed marriage refused to show this official medical certificate to the other party, no action for breach of promise would lie. The result of such an examination

would be that no person could contract a marriage without having attention directed to his or her physical fitness to do so.

Of course, when two people, presumably more or less in love, get to the stage of applying for a marriage license, no doctor's views as to their physique are likely to have much weight with them. Still the mere fact that there is a medical examination to be undergone before a marriage can take place will cause the whole population to think much more seriously about this important question than it has done in the past. A direct national premium, as it were, is placed on good health. People assess most factors in a marriage, and here would be a new one in which not only the parties themselves, but also their relatives, would show a keen interest.

From the national point of view the result would be that a return could be issued every year along with the other vital statistics showing the number of "a's" marrying "a's" the number of "a's" marrying "b's," the number of "c's" marrying "d's," and so on through the list. The country would be able to see at a glance how things were tending, and in case of the "d's," more specific information might be published in another table, showing the grounds on which they were so classified. The marriage of "d's" with "d's" would give a clue to what extent the production of degenerates was going on, and the course of the statistics would soon indicate whether further legislation was desirable. While the whole examination would be private and confidential, a duplicate of the certificate concerning each person would be filed away in the government archives. From these records properly accredited officials would, in time, be able to secure definite information as to the ancestry of the great majority of the inmates of mental hospitals and defectives generally. In the course of

a hundred years, an enormous mass of data would be available, and invaluable light would doubtless have been shed on many obscure problems of heredity.

When one talks in a general way of health certificates before marriage, people immediately jump to the conclusion that the idea is to divide society into two classes, the fit and the unfit, and to permit only the fit to marry. No one is at present competent to say who is fit to marry and who is not. It is doubtful whether it will ever be humanly possible to draw a hard-and-fast line. It is easy to pick out extreme cases—the thoroughly sound and clean-bred youth, and the lunatic descended of lunatics—but between these lies a great mass of population, neither especially fit nor especially unfit. Who is there that would dare to say just where the line was to be drawn?

Such an examination is worth striving for as an end in itself. It would make people think for themselves on this most important matter. It would offer a direct incentive to good health, particularly if the highest-grade certificates were refused to persons who, though free from disease, were not physically well developed. It would enable the state medical service to watch over the children of degenerate parents, and see that they were given the best chance possible. And, finally, it should tend to discourage experimenting before scientific knowledge is ripe for application.”—*Medical Times*, June 1912.

THE PHYSICIAN—HIS DUTIES AS AN EUGENIST AND SOCIOLOGIST.

In the new science of eugenics we have a teaching, the success of which lies largely in the hands of our physicians. Not only must knowledge of selective principles in propagation be secured, but the applications of these teachings must depend greatly on the

intelligence of the physician in his capacity of medical adviser. Some kinds of marriages he should discourage, especially when the male has contracted a sexual disease; in other cases he should advise against the production of offspring, and again he should advise against “race suicide” on the part of those best fitted to produce capable sons and daughters. In other words, under the pressure of modern social demands the duties of the medical profession are rapidly changing. The physician now is responsible not merely for the healing of the sick, but he has also a larger and more responsible duty in the prevention of disease, in the inculcation of social sanitation and in the scientific upbuilding of racial vigor through emphasis on right living and wise mating.

Again, sociologists are attacking the great problem of crime with the underlying belief that crime is an evil that if scientifically handled can be almost entirely eliminated. This may be shown from present tendencies in respect to crimes committed by juveniles, women, first offenders in misdemeanor cases and drunkards. Such cases wisely handled are no longer considered as crimes worthy of the jail, but as offences involving the use of probationary methods, fatherly admonition, medical advice and wise guidance. Experience shows that offenders readily respond to such treatment, and in most instances become normal citizens, not criminals, as under former methods. The jail, also, in which older and more hardened offenders are confined, is becoming less and less a place of punishment and more like a great school for training in morals, industry and in civic responsibility. A social policy of this sort, emphasized for a generation or two, would materially reduce the amount of crime in advanced civilization, supplemented as it would be by other constructive movements.—J. O. Dealy, M. D., *Providence Med. Jour.*

EUGENICS AND THE CINCINNATI Y. M. C. A.

A study course in eugenics has been arranged for at the Young Men's Christian Association of Cincinnati. This is the first known course on the subject that has ever been arranged. Some of the subjects to be discussed in their relation to race improvement are shown in the following outline: Biology—a Few Principles. Anatomy and Physiology of Reproductive Organs. Positive Eugenics—Definition; Laws of Transmission: Mendel's Law; Heredity; Environment; Education. Negative Eugenics—Definition; Negative Qualities; Recessive Qualities; Those Unfit to Reproduce; Chorea, Epilepsy and Mental Deficiencies; Motherhood and Infant Mortality; Declining Birth-rate; Occupational Poisons; Alcoholism and Drug Habits; Child Labor; Immigration; Employers' Liability Law; War; Preventable Diseases; Venereal Diseases.

SOCIALISTS OPPOSED TO A BUREAU OF EUGENICS.

The following resolutions, in opposition to the proposed State Bureau of Eugenics, were adopted by the Ogden local of the Socialist party at a recent meeting.

"Whereas, a bill has been introduced in the legislature of this state to 'Create a State Bureau of Eugenics,' with a commission of five to carry the requirements into effect, and

"Whereas, we believe these measures to be based upon pure theory and very doubtful in results, entirely experimental, and vesting too much power in the hands of a few men, with perhaps little or no knowledge of biology and less knowledge of psychology, and

"Whereas, we believe and know that crime is a product of wrong and perverted economic conditions, brought down through the past ages, producing physical defects and crippled souls; now, therefore, be it

"Resolved, That a copy of this resolution be mailed to our senators and representatives and copies be given to the daily papers of the state.
(Signed)

W. C. SUMNER, Chairman.

TONY HOFFMAN, Secretary.

THE UTAH PLAN IN MICHIGAN.

The curbing and controlling of the worst and most insidious of all infectious diseases, the venereals, obtained its first rational check when Utah, by specific statute provided means for reporting and quarantining such diseases.

Michigan is the next to join the honor roll in controlling this awful curse, whose worst woes are visited upon the trusting and innocent.

In this case no specific statute has been invoked. The state board of health has merely added these diseases to the others under the general health laws of the state.

G. HENRI BOGART, M. D.

Nevada Medicine

Address all articles, personals, items of interest, and books for review, intended for Nevada Medicine, to the Editor, Geo. L. Servoss, M.D., Gardnerville, Nevada.

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AN ANNOUNCEMENT.

Because of some little discussion, on the part of the Utah Medical Journal, with the J. A. M. A., some of the Nevada doctors have taken exception to this Journal. We have taken this up with Dr. Frederic Clift, editor of the Utah section and he has assured us that, in so far as he is concerned, the fight is at an end. Dr. Clift is an enthusiastic association man and is interested not only in his local organizations, but the A. M. A. as well. He was forced into this controversy because of some editorial remarks in the J. A. M. A. derogatory to this Journal, which, in justice to himself, and his Journal, he could not well overlook. He has had his say and the matter is now buried, never to be uncovered, unless he is forced to farther argument by the editors of the J. A. M. A., and both he and the editors of Nevada Medicine trust that the matter is closed permanently. The editor of Nevada Medicine believes thoroughly in the various medical associations, but also believes that local matters should be settled locally, and should not be taken up by any organ outside the locality in which they

may have happened. The J. A. M. A. is undoubtedly the greatest organ possessed by the American doctor, and is an absolute necessity, but we believe that it should remain within bounds and let Nevada, Utah, New York, Michigan, and Texas doctors fight out their little internal battles by themselves and without interference. Nevada Medicine has no intention to enter into any controversy with the J. A. M. A., as we recognize the fact that any such controversy decreases the value of the local journal. We intend making Nevada Medicine a publication which will command attention because of the class of articles and editorials published therein. We may take exceptions to some of the things occurring within our organizations, but they will be taken in a friendly manner, with the hopes that good may accrue therefrom. It will be the idea, first, last and always to give voice to matters of interest to the Public Health of the people of Nevada, and to bring about a better condition of affairs than has hitherto existed. Nevada Medicine has no fight with anyone, and will have none if the editors thereof have their way. Al-

though we may be classed with the "independents" we shall take more than a passing interest in organization matters, and hope, sooner or later, to obtain recognition from our State Association, through coming its official organ

and mouthpiece. If this occurs, Nevada Medicine will make every endeavor to increase interest in association affairs. This will be done, in fact, whether we are so recognized, or not.

SOME CLINICAL OBSERVATIONS.

FRANK D. PATTERSON, M.D.,
Falcon, Colorado.

In the following paper, Dr. Patterson gives us some very good hints, in addition to his reports of clinical observations, relative to the use of electricity, especially cataphoresis. We believe that his remarks will prove of value to the general practitioner, more particularly the man who is not located where he may obtain a commercial current. Dr. Patterson has promised us other reports of a clinical nature, and as he is a close student and a very careful diagnostician, we shall look forward to his subsequent contributions with pleasure.—Editor.

Being asked to contribute something of clinical benefit that might interest the readers of Nevada Medicine, I thought that I would briefly outline some simple electro-therapeutic procedures which I have from personal experience found to be most efficient substitutes for surgery in the treatment of diseases peculiar to womankind. Recently there came to me two parallel cases of anterior flexion of the uterus, both of them held in their faulty position by adhesions. The one continued my electrical treatments two or three times a week for about three months and was cured, while the other patient became hysterical and called in a physician who for the sake of his commission on a surgeon's fee hustled her off to a hospital where she was operated on and died about three days later. The

report from the hospital was that she had obstruction of the bowels. That I know to be false, as I could not have succeeded in getting a passage through her if there had been. The real fact is that in loosening some of the adhesions of the uterus the intestines were ruptured. That could have been avoided if I had been permitted to administer thiosinamin from the positive pole of my wall-plate, as I have done in other similar cases with success. The only objection to this line of treatment is the fact that it takes a series of treatments usually three days apart for ten or twelve weeks to effect a cure, and yet many will prefer safety to the dangers of the operating room even though it does take longer.

It is surprising how many cases there are of laceration of the cervix which result in chronic invalidism, where patients are treated for the wrong ailment, usually the doctors telling them that they have some trouble with the stomach or with the heart or both. Upon finding that there is no organic lesion of the heart and making a few inquiries as to difficult confinements, it has been my custom to make a digital examination, and until recently, if a laceration of the cervix was discovered, to advise a trachelorrhaphy. By that means have I permanently cured up many of these cases. Although in this operation, cicatricial tissue is removed, still more is formed in the operative wound, thus predisposing to a relaceration when the next child is born. By

the use of the thiosinamin administered cataphorically from the positive pole, this objection disappears, for it is a complete surprise to find how soft and free from cicatricial tissue the cervix is at the end of the series of treatments. There is usually a displacement of the uterus where the cervix is lacerated, the result of chronic congestion and consequent subinvolution, and as a rule the uterus is adherent in the pelvis. Heretofore in such cases I have not been giving any medicine except by cataphoresis, but in a case that I am now treating, the happy thought struck me to assist matters by the internal administration of two four-grain tablets of chromium sulphate three times a day.

A general practitioner, unless he desires to specialize in electro-therapeutics, does not need to spend very much money on electrical appliances. In almost every gynaecological case, a good wall-plate, current supply connecting cords and electrodes are all that are necessary, though in some instances a high-frequency outfit is required, where the parts are too tender to admit of the galvanic current. The outfit that I have is a wall-plate containing a milliamperemeter for the measurement of the galvanic current, a rheostat and volt-meter and a faradic coil. As the uninterrupted faradic tends if too prolonged to cause over-exhaustion, to get the tonic effect, this current by good rights should be interrupted from 30 to 60 times a minute, and in the absence of an automatic rheotome it has been my custom to alternately make and break the circuit at about that frequency. In the absence of a commercial current, I use 22 No. 6 dry cells for the galvanic and three for the faradic. Care must, however, be taken to disconnect the cells when not in use, even though the rheostat is turned off, it having been my mishap on first installing my wall-plate to spoil my cells by leaving them con-

nected a week or ten days; yet if one stops to reason it out, he cannot but see that where there is such a difference of potential as exists between the zinc and the carbon, that if a connection is persistently continued, this difference of potential would vanish in the same manner that water tends to seek its own level.

It might not here be out of place to briefly recall a few essentials as pertain to the polarity of the galvanic current. As we all know, acids and oxygen gravitate from the negative to the positive pole, while alkalies and hydrogen travel in the opposite direction. If in doubt as to the polarity of the wall-plate, saturate a piece of blotting paper in a solution of potassium iodide, turn on the current and place the ends of the connecting cords on the blotting paper, and iodine, the acid element is given off from the positive pole. The positive pole is sedative and vaso-constrictor, while to the negative pole fluids tend to gravitate and the blood-vessels tend to dilate, and tissues tend to break down by electrolysis. The positive pole alone is germicidal, and where a copper electrode is used, this germicidal property is enhanced eight-fold by the salts of copper, resulting from corrosion of the electrode by the acid elements there given off. If superficial action is desired, the copper electrode should be used bare, but where the copper salts are to be carried deep into the tissues, the electrode should be covered with cotton saturated with either a normal salt solution or a strong solution of copper sulphate. Where cataphoresis with thiosinamin is the object sought, electrodes should not be made of copper or of any other corrodable metal, as such metallic salts greatly interfere with the action of the thiosinamin. For this purpose, we use a platinum electrode and cover the same with absorbent cotton wet with a solution of 30 grains of thiosinamin and five grains of sodium chloride to

the ounce of water. Where there is both a laceration of the cervix and an adherent displacement, the electrode should be applied both to the cervix and to the vault of the vagina where the displaced uterus rests. Thiosinamin, though a remarkable solvent for cicatricial tissue, has very little effect upon normal healthy tissue; yet where the current is turned on too strong for the patient, it does sometimes corrode the vaginal mucous membrane. On that account it is not usually advisable to give the treatments oftener than every third day. I have sometimes given them every other day, but as to that each patient is a law unto herself.

The strength and duration of the current to be administered also varies with each individual patient. Some can tolerate as high as 70 milliamperes, while with others, 30 milliamperes will cause a feeling of intense burning. For this line of work, I rarely turn on more than 50 milliamperes, and the duration is usually from ten to fifteen minutes. Where I have both the cervix and the vault of the vagina to attend to, I usually treat each place ten minutes. As water alone is not a very good conductor of electricity, the large indifferent pad attached to the negative pole and placed on the abdomen is wet with a normal salt solution. Following the galvanic current, the faradic current usually from 20 to 30 volts and interrupted from 30 to 60 times a minute is used with the electrodes undisturbed for about five minutes. This procedure stimulates the circulation enabling it to carry away the waste products and gives tone to the parts.

In case of endometritis or of endocervicitis, the bare copper electrode is used with a current of from 20 to 50 milliamperes according to the tolerance of the patient. This I find to be far superior to the old fashioned methods

of dilatation, curettement and local application. The curette by wounding the endometrium opens up avenues for the spread of the already existing infection, while the copper cataphoretically administered closes up the dilated vessels and by its antiseptic action directly combats the infection. The dehydrating effect of the positive pole sometimes causes the electrode to adhere to the tissues and in being loosened start up hemorrhage, but this can be avoided, either by moving the electrode about or by first amalgamating it with metallic mercury after sandpapering it and immersing it in 10% sulphuric acid. After being held in the mercury, it can be polished with absorbent cotton. The mercury does not in the least interfere with the action of the copper and yet prevents the electrode from sticking. Where the fundus is involved, the electrode should not remain in the same place very long, as the current tends to concentrate at the end of the copper; but where the cervix alone is involved, the electrode need not extend above the internal os. The cataphoresis of copper is also the logical treatment for erosions of the cervix or of the vaginal wall, but these cease to form when the catarrhal condition of the uterus is cured.

On account of possible hemorrhage from the reaction, the patient should remain very quiet immediately after each treatment, especially the first hour and if possible the remainder of the day. It has only been but very recently that any great stress was laid on electricity as a therapeutic agency, but as my experience thus far has proved entirely satisfactory, it behooves me to do my duty toward humanity to use my influence as best I can to displace surgery whenever milder means will accomplish the same end as well or better.

A NEW IDEA RELATIVE TO EUGENICS.

GEORGE L. SERVOSS, M.D.,

Gardnerville, Nevada.

In discussing possible measures, to be brought up before the Nevada Assembly, with a couple of local men, objections were made to such probable bills, particularly the one requiring certificate of health prior to allowing marriage. One man said, "Supposing a young couple loved each other and were bound to marry. If it became impossible for them to obtain a license to marry within Nevada, they would go to California, or some other nearby state, where no clean bill of health was required, and get married and then come back and laugh at the Nevada authorities." He said that, while he believed the measure a good one, on the face of it, he did not think that it should be a matter of state law, but that it should be a national statute, covering the entire country. He likewise objected to a state law governing the sterilization of criminals, thinking that it likewise, should be a national matter. He also objected to the making of known conveyance of venereal diseases an assault and crime, as he said that it might become a family matter and would cause more trouble than it would effect good.

All of these objections were made in the face of the fact that he happened to be the father of four girls, two of them at the present of marriageable age. I called his attention to the fact that the vast majority of women consigned to hospitals for surgical operations upon their generative organs could trace their troubles to infection from their husbands; that the majority of degenerates among children were the offspring of the impure; that the children, blind from birth, could lay such blindness to gonorrheal infection from their fathers. He said that all this might be true, and that he would not dispute me, as I undoubtedly knew

what I was talking about, but that any interference in the marriage of two persons, attached one to the other, might work worse havoc than would allowing the entrance into such a contract, regardless.

Relative to the sterilization of the unfit he seemed to think that such a procedure was wrong, in that it robbed man and woman of their inherent right to bear children, and that, regardless of the fact that such progeny might act as a menace to society in the years to come. I called his attention to the Tribe of Ishmeal in Indiana, where upwards of four thousand degenerates, embracing habitual criminals, idiots, imbeciles, and all other sorts of unworthy, were traceable to one couple as a fountain head. He said that all of this might be true, but that the reverse might have happened, and the offspring might have been good. He practically refused to accept any argument from me to the contrary, clinging to his idea that it did not necessarily need follow that the offspring of the unfit should be likewise.

The other man, while agreeing that sterilization of the unfit might be a good thing, argued against any state law governing marriages, either of the pure or impure. He based his argument much upon the same ground as did the other, saying that a national law might be effective, but that he had his doubts in relation to anything of the sort originating in any of the states. He admitted that sterilization of the unfit might improve the status of society, as well as the person operated, and favored any such measure if it did not interfere with the copulative functions of the individual.

It was rather surprising to hear such arguments from the fathers of marriageable girls, as one would have an

idea that such men would desire every protection for their daughters. This brings up a new idea in eugenics. If the parents of children care so little about them and their futures, it seems that we must either quit our endeavors to improve the race or else secure the passage of such laws as will make it possible for us to educate both parents and children in the future possibilities, if they will not accept the ideas of the already educated and abide by them.

I believe that, were children properly educated, and early, there would be fewer marriage of the unfit, as the girls would insist upon purity in men and the men would likewise insist upon purity in the women. In other words, those about to marry would know what to anticipate in event either party to the contract might be impure in health. I really believe that such an additional law, requiring a liberal education would be quite as effective as would one requiring a clean bill of health prior to marriage. While there are a few marriages of those otherwise, and suffering from other than venereal diseases, they are very few in comparison to the many others, as no man or woman has any great desire to be burdened with a life partner who cannot fulfill his part of the marriage contract. In other words, man expects of woman certain duties, and likewise woman of man. The law of self preservation rules in such instances. Were men and women educated to realize the perils of the venereal disorders, as they are those of tuberculosis, leprosy, and numerous other chronic infections, they would inquire as to whether such diseases were present, prior to the time of marriages, regardless of the laws insisting upon such knowledge. No man in his right senses, takes as a spouse, a woman to be afflicted with a constitutional disease, as he knows that the life of neither will be one of either pleasure or profit. Nor does a woman

take as a husband one whom she knows to be unfit in any way.

However, it has been the habit of all never to say anything of the venereal diseases, publicly at least, for fear that the modesty of someone might be shocked. If such a disease might be mentioned it has rarely been given its true name, being called a "certain disease," a "blood disease," "scrofula," or one thing or another, usually meaning nothing, or next to nothing. It has been the habit of the doctor to call gonorrhea, in speaking to other than the patient, something entirely different, in that the patient might be protected. Innocent married women, suffering from gonorrheal infection, have been told that they had some erosion, an inflammation of the vagina, and ovarian trouble, due to other than the real cause, or something else, likewise untrue, as "it would never do to let her know that her husband had given her the gonorrhea, for fear that trouble in the family might follow." If our girls and boys were properly educated they would not have to ask the doctor what the matter might be, as they would know, and they should know of the venereal diseases to just as great an extent as they do of the other maladies to which flesh is heir. In fact, they should know more of such diseases than of any other, as their future health and peace of mind depends upon their not contracting such ills.

But we are told that "it is immodest to talk about such things." It would be if they were considered in a licentious manner, but the teachers, as a rule, clothe their remarks in such words as will give them dignity of utterance, rather than the reverse. Instead of making a joke of such matters, as is the case whenever the organs of generation are mentioned, as a rule, they are considered as are other organs of the body, simply as a portion thereof, and in no other manner. They are shown to have certain functions, and

to be liable to certain pathologic changes, as is the heart, the brain, the lungs, the stomach, the liver, or any other organ of the economy. Their care is given consideration and it is shown wherein any deviation from the normal means ill-health, or worse. There is nothing in the least immodest in such teachings, and if instituted it will be found that our rising generation will become better men and women through such means.

We have laws governing the sale of impure foods, but certain things are allowable, under such laws. Peas and beans may be colored artificially with copper sulphate, dyes may be used in preserves and jellies, preservatives may be placed in catsup, and still the products be within the law. However, if it is demonstrated to the people that such ingredients are present and that they may cause ill-health, the first law of nature, self-preservation, comes into effect, and the people refuse the purchase or use of such articles. This applies to other things in life. If a young woman intends marrying, and is shown that venereal diseases may mean a life of future torture to her, she will not enter into such a contract, no matter what her regard may be for the man. She will insist that her health be preserved, regardless. Man will do likewise. It seems to me that a liberal education is the only absolute means to the end, and that, in addition to insisting, through statutory requirement of a clean bill of health, prior to issuing of marriage licenses, we should likewise have laws insisting upon proper education of the children prior to any intent of assuming the marriage contract. Such education should be broad and sufficient to enable the boy or girl to recognize all of the signs of the various venereal diseases, both prior to, and after marriage. Knowledge of this sort would act to make better men and women at all times. We would not see as many libertines subsequent to marriage, as a certain amount of fear

would govern, if man knew that his wife was educated to such an extent as to recognize such maladies.

If the children were properly educated, each sex would demand greater purity from the other, as well as within itself. The girl would know how to protect herself against others of her sex who might be infected. Likewise would the boys understand self protection. The infected would be shunned and their life would be made, to a certain extent, a burden to themselves, and they would subsequently be careful, as no one desires that he be considered a Pariah among his fellows.

Educate the boy to know that gonorrhea is considerably worse than "a bad cold," and the girl to know that this infection means a possible loss of her powers of motherhood, as well as a life filled with suffering, and it will not be long until each sex will be taking good care of itself. Teach both boys and girls that syphilis means not only ill health to the one afflicted, but a degenerate progeny, and it will not be long until every effort will be made to wipe out this disease. Although the disease, in itself, is curable, tell the young what is liable to follow thereafter, and no one will do other than make an effort to remain free therefrom. The law of self-preservation will govern to a greater extent than any man-made law ever did, and with properly educated people we will see a better race subsequently. Man-made laws will be necessary in the beginning, but very shortly those of Nature will assert themselves, and we will hear nothing about making the law requiring a certificate of health prior to marriage license having to be a national instead of state statute, as each person will assert himself, and perfect his own individual rules governing his actions, in this case, as well as all other. Educate the people properly and they will take care of themselves, regardless of all the laws which may be placed upon the books.

MISCELLANY

Anedemin Tablets—are prescribed by thousands of physicians for all dropsical conditions. Physicians who do not know of the value of this preparation can be convinced by writing the Anedemin Chemical Co. of Chattanooga, Tenn., for sample and literature. Andemin is especially indicated in Brights, Cirrhosis, Valvular Diseases or all dropsies. Does not produce nausea and patients do not have to be watched as in digitalis administration. Anedemin in cans of 100 tablets can be procured by all wholesale druggists or by the company.

Neurosine.—The value of the bromides as therapeutic agents, has only been accentuated in recent years. Many chemical modifications of the bromide salts have been offered, but not a single one has been found which possesses properties, that make it more desirable for the practitioner, than the well known compounds. On the other hand, the administration of the pure salts is often attended by certain disagreeable results, commonly embraced under the name of bromism. These disagreeable by-effects can be almost entirely eliminated by the use of adjuvants and correctives. Such a combination is offered in Neurosine, which represents the most careful product of pharmaceutical skill, providing the profession with a nerve sedative which is safe and efficient.

Neurotic Anorexia.—While loss of appetite and nausea are usually symptoms of a host of diverse pathological conditions, they sometimes constitute a disease in themselves—a kind of neurosis. In these cases the physician will find Gray's Glycerine Tonic Comp. of almost specific value for restoring the impaired appetite. It is not only agreeable to take, but produces its benefits at once in such a natural way that before the patient realizes it, the normal amount of food is being taken. Its efficacy in these neurotic cases makes Gray's Glycerine Tonic Comp. exceedingly useful in relieving the severe nausea that often occur in early pregnancy.

Atonic Indigestion demands the most vigorous treatment available. For many years, Seng has held a unique place as a gastro-intestinal tonic, and under its use the most far-reaching benefits are obtainable in all functional diseases of the stomach and intestines.

Useful Remedy for the Heart.—"The great bulk of clinical evidence leaves no doubt that Cactina Pillets is an eminently useful remedy for the heart when properly indicated and properly applied. At any rate, the wealth of facts gleaned from practical bedside experience cannot fail to stimulate the interest of every open-minded physician who is striving constantly to accomplish the best possible results in the best possible way."

Malarial Conditions.—In malarial conditions a diuretic is not indicated as often as the symptoms suggest, as one always has to contend with a torpid liver, that is throwing a part of its work on the kidneys, meaning double duty for the latter.

In such cases the rational treatment is to use some agent which will stimulate all the excretory organs dividing the duty of each and causing thorough elimination.

Tongaline either alone or in combination with other agents, as indicated, will invariably expel the malarial and other poisons promptly and thoroughly.

A Safe and Efficient Sleep Producer.—Considered from the view-point of therapeutic efficiency, safety, and freedom from evil effects, in pasadyne the profession has its most reliable sleep-producing agent. Pasadyne is the distinctive name of Daniel's Concentrated Tincture of *Passiflora incarnata*, which has been used extensively by physicians for a third of a century. Its advantages over chloral and the bromides are: superiority of action, freedom from gastric disturbance, absence of habit formation, and safety. The physician who has used the several agents named and compared their advantages, will not hesitate to continue to use pasadyne in preference to chloral and the bromides.

In the practices of thousands of physicians pasadyne has supplanted all other drugs in producing sleep, on account of its demonstrated superiority. The sleep it brings about is calm and restful; the patient awakens as refreshed as from natural sleep. A sample bottle will be furnished if application be made to the Laboratory of John B. Daniel, Atlanta.

Tilden's.—When confronted by stubborn, unruly, cutaneous conditions, the physician will do well to make his prescription read Elixir Iodo-Bromide of Calcium Comp. (Tilden's), either with or without Mercury Bichloride, as conditions require.

Cord. Ext. Ol. Morrhuae Comp. (Hagee).—In the early stage of phthisis Cord. Ext. Ol. Morrhuae Comp. (Hagee) does more good than any other medicinal agent. Even when symptoms of secondary infection are prominent, such as fever, sweating, and rapid wasting, it is well borne. It is also valuable in preventing the development of tuberculosis in those who, through physique and heredity, have a marked predisposition to the disease.

Cord. Ext. Ol. Morrhuae Comp. (Hagee) improve the general nutrition, increases the number of red blood cells, and favors the accumulation of fat in the body and does not excite nausea, eructations, vomiting and diarrhea.

The New Treatment for Pneumonia.—After long and laborious clinical study—extending, in fact, over a period of more than twenty months—Messrs. Parke, Davis & Co. announce the addition of Pneumonia Phylacogen to their list of therapeutic agents. This product is designed for the treatment of pneumonia or any infection caused by the pneumococcus. Administered in the early stage of the disease it is said to cut short the pneumonic process in a manner that is truly remarkable.

Pneumonia Phylacogen has been administered to patients of all ages and of many nationalities, with highly gratifying results in a large majority of cases. "From experience gained in the study of typical cases treated under favorable circumstances," one writer remarks, "we are led to believe that almost every case of pneumonia seen within the first twenty-four hours after the initial chill will recover if properly treated with Phylacogen." Another observer, a professor in one of the large American medical schools, pays the product a high compliment in these words: "Pneumonia Phylacogen is the only therapeutic agent in my experience that has ever shown a definite therapeutic action on the pneumonic process."

In view of the fact that pneumonia is one of the commonest and most fatal of infections (it is said upon good authority that it causes more death than tuberculosis, scarlet fever and smallpox combined), the new Phylacogen gives promise of a veritable therapeutic blessing.

The Hormon Treatment of Post-operative Intestinal Paralysis.—The study of the hormones constitutes a fascinating chapter in modern physiological research. These bodies, as the name indicates, may be considered as nature's means of stimulating the functions of certain organs. Thus, for instance, it has been shown by Bayliss and Starling that the duodenal mucous membrane produces a "secretin" which when injected intravenously stimulates the pancreatic secretion, while adrenalin besides its various other actions also officiates as a hormon in the metabolism of the sugars. It would appear, therefore, that apart from their regular secretory activity many organs generate substances which are carried by way of the circulation to distant parts, and there officiate as functional stimulants.

One of the most interesting discoveries is that of Zuelzer, Dohrn and Marxer that the mucous membrane of the stomach contains a hormon, which when injected intravenously was found to stimulate intestinal peristalsis. It was later demonstrated that the same hormon can be extracted from the spleen in amounts sufficient to enable it to be utilized therapeutically. This discovery is of interest both to the physician and surgeon in the treatment of intestinal obstruction from atony of the bowel, as well as of post-operative intestinal paralysis. The

results reported by Zuelzer and Saar with Hormonal, the name under which this hormon product has been introduced, have been most encouraging. Its advantage over physostigmin, which has been employed for the same purposes, is that it produces a natural peristalsis and not one of tetanic character. While symptoms of reaction, such as fever and headache, have been noted from its use, these have been of slight and transient nature, and there is every reason to believe that this new physiologic product will prove of material service in medical and surgical practice.—(From International

A Severe Burn.—My first use of Antiphlogistine in burns and scalds was accidental. I was called by telephone to Mr. J. T., aged twenty-seven, weight 180 pounds, brickmaker, a steam pipe having exploded between his legs, scalding him badly. I ordered that no grease of any kind be used, but that cloths soaked in a strong solution of bi-carbonate of soda should be laid on the parts till I could get there. I stopped at a drug store to procure another salve I had used in such cases, and by mistake the clerk gave me two boxes of Antiphlogistine. When I reached my patient I found him suffering intensely with a big blister extending from the crotch to the ankle on the inner side of both legs, at least three inches wide and surrounded by a red inflamed surface two inches wide on each side.

I had used Antiphlogistine before in pneumonia and in sprains, so when I found that by mistake this had been sent I decided to try it. I covered the entire injured parts with a thick layer of Antiphlogistine (applied cold), put absorbent cotton over all, and bandaging loosely to keep things in place, took Mr. T. home in my buggy. When I first saw him his face was contorted with pain and he could not suppress the groans that the agony wrung from him, but, as I covered more and more of the burnt surface with the dressing, I could see the expression of pain leaving his face. I gave him some medicine to relieve pain and when I called again that evening I found he had not touched the anodyne. I asked him why he had not touched his medicine. "Well, doctor," he said, "you told me to take that every two hours while I was in pain and I have not had any pain."

The next day I let him leave his room and in three days he was back at work. I did not touch the dressing for five days, and when I took it off the parts had healed entirely.

There are two important points in the use of Antiphlogistine. First, put it on thick, thick, thick, using it hot for internal inflammations and cold for burns and scalds. Second, never put cloth over the Antiphlogistine, except a thin layer of gauze, if necessary, but put absorbent cotton in thick layers over your first dressing. Don't try to remove it as long as it sticks

to the skin for it will let go as soon as it has done its work. I have used this preparation (Antiphlogistine) frequently since then in severe burns and scalds and yet have to meet my first disappointment in its curative power.—H. B. Lee, M. D., Summerville, S. C.

EXAMINATION OF DENTISTS FOR THE U. S. ARMY.

The Surgeon General of the Army announces that examinations for the appointment of Acting Dental Surgeon will be held at Fort Slocum, New York; Columbus Barracks, Ohio; Jefferson Barracks, Missouri; Fort Logan, Colorado, and Fort McDowell, California, on Monday, April 7, 1913. Application blanks and full information concerning these examinations can be produced by addressing the "Surgeon General, U. S. Army, Washington, D. C." The essential requirements to securing an invitation are that the applicant shall be a citizen of the United States, shall be between 21 and 27 years of age, a graduate of a dental school legally authorized to confer the degree of D. D. S., and shall be of good moral character and habits.

DIABETES MELLITUS.

I am undertaking an exhaustive research into the pathology, etiology and dietotherapy of Diabetes Mellitus. I am very anxious to hear from every physician in the United States who has a case under treatment, or who has had any experience in the treatment of this malady. Von Noorden says, "the best treatment for the diabetic is the food containing the greatest amount of starch which the patient can bear without harm." If any physician who reads this has similar or contrary experience, and would take the trouble to write me, I would esteem it a special privilege to hear from him, if only on a postal card. Kindly address William E. Fitch, M. D., 355 W. 145th St., New York City.

A Proposed Physicians' Travel Study Tour.—To the Editor: The visit by a party of German physicians to the recent International Congress on Hygiene and Demography has proven that a well-managed travel study party of physicians can make a trip through a foreign country in a far more pleasant and profitable manner, and at less expense, than can be done by traveling alone. Clinics can be arranged in advance, lectures prepared and visits made to the best hospitals and health resorts, with the assurance of a hearty welcome from the leading medical men of the localities visited. For those unable to speak the languages of the countries on the Continent, this disadvantage is reduced to a minimum and the benefits of the trip correspondingly increased by traveling with such a party.

The coming International Medical Congress, London, August 6-12, 1913, gives a splendid opportunity for organizing an American tour of this sort and plans are now ready for a Physicians' Travel Study Tour, leaving New York July 3 for the most important capitals and health resorts on the European Continent: Paris, Munich, Carlsbad-Marienbad, Dresden, Berlin, Nauheim, Wiesbaden, Cologne, Brussels, the Hague, Amsterdam, etc., ending with the week of the Congress in London.

The plan of this tour has been seen and endorsed by Drs. A. Jacobi, T. C. Janeway, Ch. G. Kerley, O. G. T. Killani, L. R. Williams, Wisner R. Townsend and others. Physicians interested in such a trip should write for further and more detailed information to,

RICHARD KOVACS, M. D.,
236 East 69th Street, N. Y. City.

Digitalis Efficiency **Digalen**

**A good thing to remember
when treating pneumonia.
Sample on request.**

*The Hoffmann-LaRoche Chemical Works
440 Washington Street, New York*

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SURGICAL CLINICAL REPORTS.

F. M. McCARTNEY, M.D.,
Denver, Colo.

Venous Femoral Hernia.

Patient, Mr. M., male, laborer; age, 54.

Admitted to St. Anthony's Hospital, February 19, 1912.

Family history, negative.

Childhood history, usual diseases of childhood.

Past history negative as to present illness.

Present Illness: Some time last spring he noticed a small swelling below Poupart's ligament on the right side over Scarpa's triangle. This has been getting larger gradually during the past few months, giving only symptoms of pressure. It increased in size when standing or on exertion, and also when he strained.

Comments and Operation: This case was diagnosed as a femoral hernia, and it is almost impossible to tell it from a femoral hernia without cutting down on it. Now as we get down upon the sac, we find it filled with dark venous blood. We find that this sac is connected with the femoral vein just below the femoral ring, and we can easily see now why we thought it was a femoral hernia. We will do a phleb-aneurysmorrhaphy on this case. This is a large venous trunk, and we might be able to tie this vein off and obliterate it and get our collateral circulation through the other veins; but there have been cases of gangrene following this procedure, though not so many since we have been doing aseptic surgery. The theory before was that we got a septic clot into the vein, and it not only interfered with the vein which

was ligated, but other veins. In doing this aneurysmorrhaphy, after having the vessel freed so we can control bleeding from each side by our assistants holding it, we open the sac, turn out the clot, and then we find our opening into the vein proper (and here it is—a nice oblong opening). Now the secret in getting union on these cases is to get our endothelial layers together. (Just the same as when uniting an intestine, we need to get our peritoneal surfaces together). We take a fine needle and fine catgut and unite the endothelial layers right in the opening from the sac to the vein. Now this sac has an endothelial lining. As we have closed the opening into the vein, we keep bringing together this endothelial lining, working all the time from the inside of the sac and making this a much stronger wall than before. Now we can see here that we have not narrowed the lumen of this vein. Close this up without drainage. This case made a nice recovery.

Popliteal Aneurysm.

Mr. S., age 30, laborer.

Admitted to St. Anthony's Hospital, Decfr 30, 1911.

Childhood history, usual diseases of childhood.

Past history, negative as to present illness.

Present Illness: About two months ago, while doing heavy lifting, he noticed a swelling back of the knee, which kept increasing in size until pressure caused so much pain he had to discontinue his work. On examination it was very easy to make a diagno-

sis, as we could feel the pulsation very distinctly and hear the aneurysmal bruit.

Comments and Operation: Aneurysms of the popliteal artery are by far the most frequent of the surgical and operable types, although the artery lies fairly deep, with some very important structures around it. We will be able here to cut down on this and dissect out our artery and do an arterio-aneurysmorrhaphy, as it is not safe to tie off a popliteal artery where it is possible to close the leak, as there are a great many cases reported of gangrene of the toes and foot following ligation of popliteal artery. In cutting down here, we go slowly, pushing things aside, as we have some structures we do not wish to injure, as the nerves that are in this space, such as the external and internal popliteal and the popliteal vein, which is sometimes a vena comes. As we get down on this one we find it to be the case, and our aneurysmal sac pulsating very nicely. Now as we are short of room here, we

will place two pieces of tape around this artery, one above and one below the sac, and use these to control our hemorrhage and not injure the wall of the vessel. Then we open our sac and find an organized clot sac lined nicely with an endothelial lining, and we hunt for our opening into the artery, and here we have it, a nice round hole.

We take a fine needle and fine catgut and first close the endothelial lining of the artery right down into the opening. After we are sure that we have that well closed, then we start bringing together the endothelial layers of the sac over the top of the opening into the artery, and after we have another row of stitches we allow the needle to catch the wall of the sac, working all the time from the inside of the sac. In other words, we are puckering this sac up over the opening into the artery, by making sure we are keeping the endothelial surfaces together so we can get union.

This case made an uneventful recovery.

A REPORT OF THE BABY SHOW.

AGNES DITSON, M.D.,
Denver, Colo.

The management of the National Western Stock Show has demonstrated its progressiveness and its interest in the general welfare of mankind by introducing a Department of Eugenics in the annual exhibition in Denver. This section includes three exhibits, A Child Welfare Exhibit, A Mendelian Law Exhibit, and a Human Stock Exhibit, known for the present as the "Baby Health Contest."

The first baby contest on the basis of mental and physical development was a feature of the Louisiana State Fair in 1908. Since then there have been similar contests in seven different states. In 1910, in the State of Iowa, under

the management of Mrs. Mary T. Watts, president of the Iowa Congress of Mothers, and Dr. Margaret V. Clark, a contest was held which excited considerable interest. The system of judging was practically the same as that used in Louisiana, but was somewhat elaborated and put into the form of a score card. In 1911, through the co-operation of the Iowa Congress of Mothers, The Iowa Federation of Woman's Clubs and the Child Hygiene Committee of the National Congress of Mothers, the Baby Health Contest was held as a department of the Iowa State Fair. The score card was revised somewhat, and copyrighted. The movement

was endorsed by the Committee on Public Health Education Among Women of the Council on Health and Public Instruction of the American Medical Association, and their score card, etc., published in the annual report of this committee. In November, 1912, Mrs. Watts proposed the idea to Dr. Mary Elizabeth Bates, and it was through her efforts that it gained a footing here and that the necessary factors were brought together.

About two hundred and fifty children were entered (the exact number is not known, because only the prize babies from remote districts were entered here), their ages ranging from twelve to thirty-six months. The score card used was the one copyrighted by the Iowa people. It is as efficient, probably, as most such things at their inception, but nevertheless very inefficient and unsatisfactory. It admits of many different interpretations and standards of examining and scoring, and the data from different shows would not be comparable. The results here were relatively satisfactory, for the reason that the physicians called upon responded with a great deal of interest and put in a lot of good work, basing their judgments upon a much wider range of knowledge than that indicated on the card.

Owing to the different standards of those examined outside of Denver, only one hundred and thirty-four of the cards are of scientific value. These present some interesting data; there were forty-nine different blendings of nationality:

Mother	Father
American-American,	52.
American-English,	2.
American-Swede,	3.
American-German,	6.
American-German Welsh,	1.
American-Scotch,	4.
American-German English,	1.
American-Irish,	1.
American-Dutch,	1.

Mother	Father
German-German,	4.
German-English,	2.
German Irish-English,	1.
German-American,	1.
German American-Irish American,	1.
German-Italian,	1.
German-Jew,	1.
German Irish-Irish,	1.
German-Belgian,	1.
German-German Scotch,	1.
Danish-Danish,	1.
Scotch Irish-German,	2.
Scotch Spanish-French,	1.
Scotch-English,	1.
Scotch-American,	1.
Scotch-German,	1.
Scotch English-Scotch,	1.
Irish-Irish,	8.
Irish-Scotch,	1.
Irish-Welsh,	1.
Irish German-German,	1.
Irish-German,	1.
Irish-Danish,	1.
Irish-English,	1.
French-English,	2.
French-Scotch,	1.
French-Welsh,	1.
French-Scotch Irish,	1.
Swede-Swede,	2.
Swede-Bohemian,	1.
Swede German,	2.
Jew-Jew,	2.
Syrian-Syrian,	2.
Welsh English-Scotch Irish English,	1.
Norwegian-Norwegian,	1.
Italian-Italian,	1.
English-German,	2.
English-English,	1.
English French-Scotch Irish,	1.
English-Scotch,	2.

Of the 134 children examined 78 were first in order of birth; 27 were second, 13 were third, 7 were fourth, 4 were fifth, 3 were ninth, 1 was tenth, 1 was eleventh.

The younger people are more receptive of the meaning of the movement and are perhaps prouder of their babies. They are, of course, the most desirable ones to reach.

The average age of the mothers of first-born, 24; fathers, 27; second-born, 27; fathers, 32; third-born, 31; fathers, 36.

The average score of the first-born, 94.42 per cent; second-born, 94.66 per cent; third-born, 95.07 per cent; fourth-born, 94.00 per cent; fifth-born, 93.71 per cent.

Ninety-seven were breast-fed, 15 on cow's milk, 22 on artificial foods.

On the whole, the breast-fed babies ranked highest; those fed on cow's milk ranked next; and those fed on artificial foods ranked lowest.

Babies accustomed to less than 12 hours sleep in 24 showed a lower score; 14 to 16 hours showed best results.

The following occupations were represented by the fathers of the children who were examined: Farmer, machinist, laundryman, window-cleaner, physician, real estate dealer, clerk, florist, cook, keeper of pool hall, policeman, landscape architect, salesman, stenographer, dentist, contractor, civil engineer, horseman, glass-worker, freight agent, well driller, high school principal, paper hanger, foreman of city shops, detective, butcher, saloon keeper, auditor, manufacturer of surveying instruments, bricklayer, blacksmith, optician, barber, university professor, druggist, hardware finished, boiler-maker, pullman conductor, police officer, dairyman, teamster, photographer, carpenter, plumber, draughtsman, railway fireman, stationary fireman, foreman of American express, veterinary, grocer, miner, mail clerk, pressman, state bee inspector, brakeman, book-keeper, merchant, laboratory dentist and electrician. These were from the city. The parents of the rural babies were either farmers or stockmen.

The range is wide, but on the whole it may be said that it was neither the society snob class nor the illiterate, but the thinking people of Denver who entered their babies. The usual jealous-

ies and accusations of unfairness were conspicuously absent. Many said that they did not expect a prize, but wanted to know how their babies compared with others. There were uniform requests for a copy of the score card, even by those who won prizes, some saying that they cared more for the card than for the prize. There were unlimited intelligent questions in regard to defects and their cause and remedy. It was remarked by several mothers that it was a liberal education just to attend such a contest, and that they had learned a great deal, etc. General public interest was awakened, not only in the contest, but also in the subject of eugenics. At the public library it was stated that there had been a great demand for books on eugenics, and all the volumes were out the week following the show.

The indication is that the people are ready and hungry for the fundamental principles of eugenics and eugenics, and that the parents' own child is the avenue through which they can and will gain an understanding of these principles, providing scientists can put their knowledge in terms of the child. Under the proper management and direction, it is capable of bridging the gap between the scientific and the practical; of teaching the public and of gathering in much valuable data for scientific study.

The object of the eugenics section of the National Western Stock Show, as set forth by their circulars is, "to demonstrate what normal infancy is and what superior infancy may be; to teach the conditions of normal and improved parentage and encourage the intelligent care of children. Few parents have any knowledge whatever as to what constitutes a normal infant. This contest will enable them to secure this knowledge and to have their babies passed upon by competent and scientific authorities at a time when it is possible to reduce the abnormal conditions and improve those which are sub-nor-

mal. An opportunity will also be had to educate parents as to the proper care of children in order that they may have health for both body and mind." This object as set forth is euthenic rather than eugenic, since it provides education chiefly in the improvement of such stock as we have, rather than in the generation of better stock. But if we examine all the possible immediate and remote results of an exhibition and scientific judgment of human stock, it becomes evident that the interests of both euthenics and eugenics can be thus served, and that the ultimate results will advance eugenics more than euthenics.

Such an exhibition certainly affords a great opportunity to find and correct remediable conditions in young children, and to educate parents by direct demonstration, by child welfare exhibits and by educational pamphlets on almost innumerable subjects both physiological and psychological. And, of course, this education is not limited to the parents immediately concerned. Through various publications, there is an opportunity to influence the general public in favor of improved environmental conditions for children.

But further than this, the fact that intelligent people will enter their children in such a contest indicates the awakening of an interest in the relative value of human stock. And minds thus interested are the best soil in which to plant the conclusions of science as to what constitutes good human stock, what laws govern heredity, and what steps may be taken to make intelligent

application of these laws toward inhibiting the further reproduction of the unfit, and stimulating the reproduction of the fit. The general public will tend to become better informed on the laws of heredity, will be more likely to take them into consideration in their matings, and more likely to uphold any proposition made in the interests of practical eugenics.

The direct effect upon the children will be to stimulate respect for the body and its functions, and, particularly if the contests are rearranged to include children up to the age of puberty, to provide a more suitable knowledge of biology and heredity in general and of their own family traits and their transmissibility in particular, and to create a feeling of responsibility to the race in their own reproduction. It may do much to unveil sex, and help to solve sex problems.

But in order to obtain these results, these exhibitions of human stock should not be left to Women's Clubs and Mothers' Congress Associations or to State Fairs for their scientific management. Their spectacular possibilities, and their popularity will invite all manner of promoters to use them for commercial purposes, which will not only deprive them of scientific value, but will exert a harmful influence. They should be regulated and the system of scoring and management dictated by an organized body of scientists, which should have the co-operation of the medical profession from a scientific standpoint, as well as from the standpoint of Public Health Education.

PNEUMOCOCCIC MEMBRANOUS ANGINA WITH REPORT OF TWO RECENT CASES.*

JOHN LINDAHL, M.D.,
Denver, Colo.

This form of affection of the throat does not seem to have received much at-

tention from nose and throat men in general. Kyle says we have a variety

*Read before the Medical Society of the City and County of Denver.

of fibrinous or membranous inflammation of the mucous membrane of the throat, in which there are no specific organisms, the mucous membrane is not altered, and the false membrane can be stripped off, and there is no bleeding when removed. If it is adherent, it is due to organized material on the surface; the bleeding when removed is due to capillary budding in attempt to organization. The exudate he considers due to pressure of the blood vessels on the ducts of the muciperous glands, preventing them from pouring out the mucus, hence solidification of the fibrin. Coakley speaks of a membranous rhinitis which occurs in children poorly nourished. There is no faucial membrane, differing in this respect from diphtheria. He says, bacteriologically the membrane contains staphylococci; histologically it consists of fibrin with numerous epithelial cells, in various stages of degeneration, and leucocytes. The false membrane in the two cases which I intend to report, objectively appeared as a white dense fibrinous membrane, edges bluish-white, due to beveling out to a very thin edge, thickness in the center one and a half m.m. It adhered very tenaciously to the mucous membrane, when grasped with forceps; only that portion in the grasp of the forceps came away, leaving a raw bleeding surface. In only a couple of instances did I succeed in getting a large patch, one c.m. wide by one and a half c.m. long. A swabbing from, and a small piece of membrane, were examined by the city bacteriologist, Dr. Mitchell, and showed pure pneumococcic culture. It is not surprising that the pneumococcus should cause a fibrinous exudate locally in the fauces, when we know that fibrin is present in the alveoli of the inflamed lung in croupous pneumonia and in some instances a pseudo-fibrinous membrane extends into the bronchioles. The proclivity of the pneumococcus to cause local inflamma-

tion is definitely settled. Osler, in his recent work, mentions the following local affections, where the pneumococcus is an etiologic factor: tonsillitis, glossitis, pharyngitis and erosions in the mouth, acute and chronic suppuration of the ear and accessory sinuses, inflammation of the membrane of the brain. It is a common cause of primary and secondary meningitis. In the bronchi it has been found associated with bronchitis and bronchiectasi, acute edema of the lungs, and in pleurisy, empyema, acute arthritis, primary and secondary forms of acute peritonitis, particularly in children. Appendicitis, endocarditis, pyelitis and local abscesses, in various parts of the body, may be caused by it. I do not claim that it is the etiologic factor in all pseudomembranous inflammation in the throat, except diphtheria. Many other organisms no doubt are capable of causing false membranes, even irritation and traumatism. We must not forget that some of the numerous strains of pneumococci, differing in virulence, are normal inhabitants of the mouth and pharynx. They are present in a great proportion of dwellers in large cities, and are also found in the mouth and fauces of farmers living in salubrious country districts.

Report of Cases.

Case One: Mr. A. P., age 35, taken ill August 3, 1912, with sore throat and chills; temperature, 103°; pulse, 120; congestion and inflammation of the mucous membrane of the tonsils, fauces and pharynx. Temperature on second day, 103°; pulse, 104. In the evening a small white patch was noticeable on the front of the right pillar; the next morning, on the third day, the pseudo-membrane had spread, covering the pillar and half of the tonsil. Careful swabbing of the membrane was done, detaching a small piece of it with sterile forceps. This was sent to the city bac-

teriologist, Dr. Mitchell, who pronounced it a pure pneumococcic infection.

On the fourth day the temperature was 100°; pulse, 90; membrane covered tonsil and some of the anterior surface of the posterior pillar. Fifth day, temperature, 99°; pulse, 84; membrane had spread on to the posterior surface of pillar. On the sixth, temperature and pulse normal, throat clear except a small patch on posterior surface of right pillar. The membrane dissolved and disappeared on the side opposite the advance. No glandular involvement or odor was present in this case. Recovery complete on the fourteenth day.

Case Two: Mrs. E., 33, previous health excellent, taken sick with sore throat and chills on September 5, 1912. When seen by the writer on the fourth day of her illness, temperature, 103°; pulse, 114, tonsils inflamed and enlarged, surface square as if they had been cut with a tonsillotome, crowding the uvula forward—a condition met

with in diphtheria. The dark-red hue and odor of the latter disease was not present, nor was there any membrane, only white plugs in the lacunae of the tonsils. On the morning of the fifth, temperature, 101°; pulse, 90; white membrane covering the anterior pillar on the left side, extending on to the tonsil. Membrane was swabbed and a small piece taken for bacteriologic examination showed pure pneumococcic infection. On the sixth day the membrane had extended over the tonsil, anterior pillar had cleared. A patch on the right tonsil had appeared since the previous visit. On the seventh, the membrane had traveled along the edge of the left side of the palate, to the left side of the uvula and its posterior surface; the membrane had disappeared on the left tonsil. On the eighth day the membrane had extended to the left side of the pharynx, back of the left pillar. Ninth day, the throat was clear, pulse and temperature normal, patient discharged.

Differential Diagnosis.

Pneumococcic Membranous Angina.

Appearance of throat.

Active hyperemia and inflammation of mucous membrane, color, bright red.

Does not bleed if rubbed vigorously with cotton-covered probe, any more than ordinary inflamed throat.

No odor of any kind.

No glandular involvement except in mixed infection.

Membranes appear some forty-eight hours or later.

Color white like porcelain with bluish white edges, due to transparency, on account of thinning out of the edges to such extent that one has to look close to tell the junction with the mucous membrane.

Does not loosen at edges, melts away gradually; portion first formed disappears first; is not cast off en masse.

Diphtheria.

Appearance of throat.

Passive hyperemia; inflammation of mucous membrane, color dark-red.

Bleeds from the lightest touch with a cotton-covered probe, especially when rubbed.

Very offensive odor characteristic of the disease.

Membranes appear in twelve hours or sooner.

Bluish-white changing to yellowish-white, then to gray, same thickness in the center and the edges, except when it reforms in the latter stage of the disease, when the edges are thin.

Loosens first at the edges, which curls up, and is often cast off en masse.

Spreading in all directions very fast.

Adheres tenaciously; can usually be removed by forceps a patch at a time.

Spreading in one or two directions gradually.

Adheres very tenaciously; only the part in the grasp of the forceps comes away; if traction is sufficient the underlying mucous membrane is elevated some and patient complains of pain; if further effort is made a piece of membrane may be removed when the bleeding is capillary, the blood arterial.

Temperature high during the first three or four days, then returns to normal, although the membranes continue to spread.

Pulse increased during the first three or four days of the infection; normal during the latter part of the existence of the exudate.

No toxemia to any extent.

General condition good.

Treatment.

In both cases consisted of and was carried out as follows: Bowels moved by salines; nuclein solution, teaspoonful three times a day, to stimulate leucocytosis. Throat swabbed alternately every three hours with tinct. iodine and one per cent of formaldehyde in fifty per cent. of boroglyceride, on the membrane and its immediate vicinity, and gargled between times with twenty-five per cent. of alcohol and hot water.

Conclusion.

Pneumococcic membranous angina is important from a diagnostic and prognostic standpoint to the physician. It is very important in this day of sharp competition, to be able to make a correct diagnosis at first examination; the

Bleeding is capillary, venous and very profuse.

Temperature high, according to the severity of the infection and continues during the existence of the membranes.

Pulse greatly increased in frequency, with low tension during the time of the exudate.

Always toxemia.

General condition not good, depending on severity of infection.

Bacteriologic findings are the ultimate solution of the differential diagnosis.

points in differential diagnosis enumerated should make this possible.

While two cases do not weigh much in differential diagnosis, however, they show to a certain extent that membranous angina is not a clinical condition found in old people, nor in individuals of very low vitality, as claimed by many authorities, as case one was a man in average good health, and case two a lady of splendid physique and excellent health.

That the cases were not diphtheritic, is shown, aside from the bacteriologic finds, by no contagion, although there were small children in both families, one nursing her sick mother, and no precaution was taken to guard against infection.

REMARKS BEFORE THE WESTERN SURGICAL ASSOCIATION, DECEMBER 20-21, 1912.

By DR. H. G. WETHERILL,
Denver, Colo.

Gauze Drainage.

It is with much hesitation that I take exception to anything the reader of the paper suggests for I have great respect

for his opinion, but I find my views in this instance so opposed to his that I must take exception to them. I feel that he goes backward a long way in urging

the use of gauze as a drain at the present time. I have had the impression that it was generally conceded that gauze was not good as a drain; that it answers very well as a pack to wall off infected areas and that it acts well to arrest oozing, but that as a drain it had been abandoned. I am also unable to understand why he should refer to serum as forming adhesions. My conception of the formation of adhesions has been that they were due to erosion or destructive inflammation of the endothelium of the peritoneum and a gauze "drain" favors such erosion, as we all know. If this erosion does not occur then adhesions do not occur. They do not usually occur on smooth, unbroken unirritated peritoneal surfaces any more than they occur on apposed unbroken epithelial surfaces.

With reference to leaving gauze drains four or five days, I should anticipate that if we were to do that today, as we did in the past, we should again have many fecal fistulas. The gauze in the peritoneal cavity not only produces endothelial erosions, which favor adhesions, but if left long enough, and particularly in tuberculous disease, it produces fecal fistulas.

I had hoped that we had gotten away from the use of gauze as a drain.

The advocacy of early operation in acute infections astonishes me. Pelvic infections, particularly of Neisserian origin, are unquestionably better left alone till the acute stage is past. If so managed they may never require surgical treatment. I had assumed that this point was universally conceded.

Chloroform as an Anesthetic.

In any discussion of general anesthetics in which chloroform is mentioned, the opportunity should not be lost to impress anew upon the profession at large the latent dangers of chloroform. I had intended to write a paper on this subject for this meeting,

not because there is anything particularly new in it, but because I believe that the time has come when chloroform as a general anesthetic ought to be absolutely abandoned and that we should all do what may be in our power to stop its use, everywhere and under all circumstances. I say this deliberately.

Our present knowledge of the late poisonous effects of chloroform, as originally pointed out by Guthrie of London, and brought to the general attention of physicians by Stiles, of Edinburgh, and by Bevan and Favill, in this country, is such that chloroform is already almost driven from our hospitals as a general anesthetic, and it should be driven out altogether, for notwithstanding the enormous primary danger of chloroform in comparison with ether and other anesthetics, we know of the late poisonous effects it produces and that death from it may occur two or three or more days after its administration. In the last year or two our attention has been directed to the fact that chloroform is dangerous in those fields in which we have heretofore regarded it as particularly safe. I refer to the use of chloroform in obstetric work. I saw at the Johns Hopkins hospital last June the specimens from a maternity patient who died from late chloroform poisoning, exhibited by Dr. Williams. We now know too that it is a highly dangerous anesthetic for children on account of its late poisonous effects. That the administration of chloroform to women in labor produces hemorrhage in the newborn, is also now known to us.

If chloroform is primarily highly dangerous, if also highly dangerous on account of its secondary late poisonous effect, if it is going to kill women in labor and kill the unborn and newborn child, the time has come when it must be absolutely abandoned as a general anesthetic.

MEDICAL PROGRESS

HOW DIPHTHERIA ANTITOXIN IS MADE.

In initiating the immunizing treatment of the horse, a first dose of about 1000 units of diphtheria antitoxin is injected subcutaneously, this being followed by a relatively small dose of the specific toxin. After several days, when the reaction and fever have abated, a still larger dose of toxin is injected; and the treatment is continued in this manner for at least two months. At the end of this period the horse in all probability will be conditioned to produce a considerable amount of antitoxin, although in a large percentage only a very small quantity is yielded, such horses proving utterly worthless for this purpose. A well-adapted horse will show from 300 to 900 units per Cc.

When the animal under treatment shows a sufficient number of units per Cc. to warrant bleeding, its blood is drawn off through a cannula inserted into the jugular vein. By means of a rubber tube attached to the cannula the fluid is conducted into bottles containing a solution of sodium citrate, which prevents clotting. As much as 12 liters at a time may be drawn without weakening a horse to any extent.

The bottles containing the blood are allowed to stand for about twenty-four hours, during which time the red and the white cells and all floating material, because of slightly greater specific gravity, gradually settle to the bottom, leaving the plasma with its contained antitoxic bodies at the top, whence they may be decanted off.

The Refining and Concentrating of the Serum.

In the early days of antitoxin therapy the crude plasma, containing all of the irritating and rash-producing properties of horse-serum, was injected. A comparatively large volume was required for a dose, as at that time it was

not often that a serum containing as high as 500 units per cubic centimeter was procured from a horse. Even at this rate 2 Cc. of fluid often was required for an ordinary immunizing dose, while a curative dose often as much as 20 Cc. or even more, was necessary. Hence, the injection of antitoxic serum was really nothing less than heroic treatment.

No great improvement was made upon this state of affairs until the year 1904, when Dr. Gibson, of the New York Department of Health, announced his method of concentrating and refining the antitoxic serum by precipitating out the antitoxic globulin. As a result of his experiments, he was able to remove from the serum a large percentage of the non-antitoxin bodies. Hence, the volume being greatly diminished and most of the irritating properties removed, the severity of the injection was greatly reduced. The method of Gibson has since been markedly improved upon by Dr. Banzhaf, of the same laboratories.

Probably the most widely used method of refining and concentrating antitoxic plasma is the following modification of the Gibson method:

The plasma, after having been drawn off from the red and white cells, is heated at a constant temperature of 56° C. for fifteen hours, and then diluted with one-third of its volume of water. By means of ammonium sulphate, the globulin, anti-toxic and non-antitoxic, is precipitated. On filtering through paper, this precipitate is obtained separately from the albumin and various other soluble constituents. It is then brought into solution again by means of sodium chloride, when the antitoxic globulin may be precipitated with dilute acetic acid. After another filtration, the isolated antitoxic globulin is obtained as a precipitate on the papers.

The filter-papers with this precipi-

tate upon them are placed in a press in pairs, face to face with an intervening layer of absorbing paper between each pair, and the water, with a large percentage of all soluble material, is pressed out. The pressing completed, all salts are removed by dialysis. This antitoxic globulin solution is then brought up to the normal salt constituency of the blood.

After dialysis, the antitoxin is placed on ice for at least two weeks, when it is filtered through paper pulp to remove whatever insoluble matter it may contain, and then through a Berkefeld clay filter, to eliminate all bacteria. We now have the antitoxic globulin itself, almost entirely free from extraneous matter.

The dread of rashes, serum sickness, and so on, is gone forever. Nor is this the only improvement, for the volume (now tremendously reduced) is of greatest importance. Where previously 10 cc. or more was required for a dose of 5000 units, today the physician needs to inject only 2 Cc., or even less; while the danger from ill effects is reduced to practically nothing. Abstract of an article by Arthur M. Slee, Immunologist at the Slee Laboratories, Swiftwater, Pa., republished from *The American Journal of Clinical Medicine*, 1913, January.

Moving Picture Eye Strain.—P. I. Leonard (*February Medical Herald*), says that under the most favorable conditions moving pictures are a severe test of distant vision and endurance, causing injection of the lid-margins and conjunctiva, lachrymation, retinal fatigue, pain in and about the ciliary region, headache (frontal, less often occipital), vertigo and muscae volitantes. Strongly illuminated images cause most fatigue, and secondly, sudden changes from black to white or vice versa.

Blood Cultures in Aural Disease.—A positive blood culture (*American Jour-*

nal of Surgery), in a case of otitic or mastoid disease is pathognomonic of sinus involvement and an absolute indication to tie off the internal jugular vein.

Eczema Simplified.—A Ravogli (*Lancet-Clinic*, Feb. 8), says that we see in eczema three factors: (1) a traumatic or chemic or physical irritation; (2) the action of staphylococci; (3) the reactive power of the skin, connected with a peculiar condition of the organism, anaphylaxis. "The variety of eczema, as erythematous, papular, vesicular, etc., is only incidental, and has to be referred to the degree of inflammation and to the sensibility of the skin." He holds that a patient with eczema must be well fed, withholding only those articles of diet which are difficult to digest and which tend to fermentation. "Eczematous surfaces have to be cleaned and kept aseptic, as well as possible, just like any other inflamed or suppurating surface." Dyspepsia, constipation and anemia, if present, are to be treated *secundum artem*. Dr. Ravogli has seen no good effect from staphylococcic vaccine. He considers local external treatment the key to success. "Acute eczema has to be treated like any other dermatitis: Applications of aluminum subacetate, 2% solution, and dusting the surface with amylum powder. For vesicular eczema, liniments with carbonate of zinc, or with ichthyol, are very beneficial. In recurrent vesicular eczema, painting the surface with tincture of iodine, as is done to sterilize the skin in surgical operations, and then covering with an oxid of zinc paste, has given very good results. Rhagades must be touched up with nitrate of silver, from 3 to 5 per cent., to bring them to recovery."

Thyroid Gland in Bright's Disease.—The editor of the *New York Medical Journal* cites with approval the use of this agent in 35 cases of chronic nephritis, by J. F. Percy, who found that

thyroid gland in full doses increased diuresis, caused the urinary solids to return to normal and the albumin and casts to disappear from the urine in from four to six weeks. It also reduced blood pressure and caused the local and general nephritic symptoms to vanish. The editor of the *Journal* ascribes the beneficial effects of thyrotherapy to the antitoxic role of the thyroid gland, which, he thinks, clearly accounts for Percy's successful results.

Intraurethral Chancres.—A. E. Cerf (February Critic and Guide), reports four cases of chancre within the urethra, occurring in his own practice during the past three years. Microscopic examination showed no cocci, but numerous red blood corpuscles. An indurated spot could be felt, never deeper than three-fourths of an inch from the meatus. The inguinal glands showed bilateral enlargement. Cure was effected by means of the usual antisiphilitic treatment.

Treatment of Pernicious Anemia.—Alfred Croftan (*Lancet-Clinic*, Feb. 15) gives large doses of hydrochloric acid (10 to 15 drops of the strong acid), in a half glassful of gum arabic water (ounce to quart), a few minutes after each meal, repeating the dose in 30 minutes. He says: "The results in three-fifths of the cases are astonishingly good, in one-fifth doubtful or fleeting, in one-fifth altogether negative." J. A. Stealey (16 cases), advocates a largely meat diet, deep intramuscular injections of sodium cacodylate (commencing with $\frac{3}{4}$ grain and reaching a 6-grain dose daily, then gradually tapering off in frequency to every other day, every third day, etc.), and particularly to search for and remove, if possible, any particular cause (colon bacteriemia, septicopyemia, syphilis, sarcoma, chronic malarial infection, intestinal parasites) of the disease. Frank Smithers, of the Mayos' Clinic (57 cases), said that in a study

of 145 stools they found parasites (harmless amebae, trichomonas hominis intestinalis), in 59% of the specimens, whereas in 57 cases of pernicious anemia they could discover parasites in only four instances. They have sometimes diagnosed pernicious anemia from the blood picture, and have found a bad gall-bladder, carcinoma of the liver or something of that nature. He concludes that "there is a natural course of the disease in the given individual, and that whatever we do he will pursue that natural course of improvement and relapse, and will usually die within ten years."

Contradictory Findings in the Wassermann Test.—The frequency with which different and even opposite results are obtained by various laboratory workers when examining specimens of blood taken from the same patients at the same time and in the same way, is remarked upon by Abr. L. Wolbarst (*New York Medical Journal*, Feb. 22). Among 37 of his cases tested simultaneously in this way, there were laboratory disagreements in 11 cases, or 30 per cent. The solution which he offers is truly democratic, namely, to have the same blood examined by three or more competent serologists, and let the majority decide.

For "Burning" Feet.—Dr. C. F. Taylor, of the *Medical World*, in answer to a correspondent, says: "Burning of the feet is generally considered as being due to disturbed balance of the nervous mechanism, which causes arterial hypotension and peripheral vasodilation in the affected parts. Many cases yield promptly to moderate doses of digitalis internally, and some observers use an infusion locally. Valerian, hyoscyamus and camphor may be given internally also. Oil of cajuput, locally applied, has proved of service. Sponging the skin of the feet with spirit of turpentine before retiring, has been found of benefit in certain cases."

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CONCERNING THE TEETH.

Eruption is precocious in the tuberculous, scrofulous or syphilitic diathesis, with premature ossification of the bones of the head and other parts. It is delayed in late general development, particularly from rachitis (with open fontanels and epiphyseal enlargements). The teeth are displaced backward or forward when there is a lack of full development of the jaw.

The permanent upper central incisors are dwarfed, notched and sometimes peg-shaped in hereditary syphilis (erosion of first lower molar), along with interstitial keratitis and otitis and puckered scars at the angles of the mouth and anus. The temporary teeth may also be notched, furrowed, pitted or honeycombed from other simple causes, such as lack of enamel or fol-

licular stomatitis. The incisors are inclined forward, with slight protrusion of the upper lip, in thumb-suckers. The teeth are deformed and quite prominent in congenital diplegia. Rachitic teeth (particularly the incisors) show transverse and longitudinal grooves with uneven enamel, which rapidly wears off. Such premature decay is also noted in pregnancy, lactation, diabetes mellitus (teeth may fall out from alveolar periostitis), and infantile paralysis. The teeth are often eroded on the labial surface in gouty subjects, who are also most prone to the infections causing pyorrhea alveolaris. Lactic acid fermentation in the mouth usually accompanies dental caries. This acid condition, "setting the teeth on edge," can be alleviated by the local and stomachic use of mild alkalies

(magnesia, sodium bicarbonate), and by limiting the amount of sugar and candy ingested.

In the care of the teeth during pregnancy, Paddock recommends milk of magnesia, lime water or sodium bicarbonate (teaspoonful in a glass of water), used as a mouth wash after each meal and at bed time, forcing the substance well between the teeth. According to Talbot (*Journal of the American Medical Association*), from twelve to twenty per cent. of all patients have pus-forming germs in the oral cavity, and Miller has found over fifty varieties of microbes in the mouth. For the past 35 years Talbot has used as an antiseptic astringent prophylactic a mixture which he calls iodoglycerole, which is made with two parts of water, three parts of zinc iodid, five parts of iodine and ten parts of glycerin. This preparation may be used on the gums (and teeth), every day, if needed, without injury. Talbot claims to have reduced dental decay in his patients 30 to 40 per cent. during the past decade by means of this formula, and he advises its weekly application to the gums, teeth and mucous membrane of school children once weekly, to prevent infectious diseases. He also alludes to its practical value in the treatment of diseased and inflamed tonsils.

Teething as a pathogenic factor in infants was probably much over-estimated in the past, but is perhaps now sometimes overlooked. According to Ruhraeh, teething may cause restlessness, sleeplessness, fever, stomatitis, vomiting, diarrhea, enlarged cervical glands, eczema, urticaria, bronchitis and convulsions, especially in rickety children. The gum may be lanced if swollen and if the tooth is nearly through, or it may be rubbed with a silver thimble or with the finger covered with gauze. A dose of calomel often relieves the fever or gastrointestinal symptoms. Restlessness and sleeplessness can be relieved by rubbing the

gum with a drop or two of paregoric; or by applying sodium bromid in solution with glycerin; or with bromids, chloral or phenacetin internally.

SOME REASONS AGAINST THE SEGREGATION OF PROSTITUTES.

The Colorado Society for Social Health wishes to draw the attention of the members of the legislature and others to House Bill 373 by Dr. Biles, and to present in opposition to that bill the following arguments:

Dr. Howard A. Kelly, of Johns Hopkins, in an article appearing in *Social Diseases* for July, 1910, says:

"Governmental regulation or police control and inspection, and, if need be, sequestration of the prostitute, has been elaborately tried for generations in Europe. The result of the best directed efforts has been utter failure. Regulation has failed even in Germany, where the man as well as the woman can be controlled, where men like Lesser, Neisser and Blaschko, the highest living authorities, declare that it is worse than useless."

Fournier, the French authority, declared that venereal disease steadily grew worse, in spite of regulation, and that there was this serious disadvantage about the "reglementation," as it is called, that it gives the governmental stamp of approval to the iniquitous traffic, and an assurance of immunity from infection which is but specious and illusory.

"I have myself taken pains to put before the English public a pamphlet on 'Regulation,' written by Prof. Chanfleury Van Ijsselstein, of Geneva, who, having charge of the public morals, which means the supervision of prostitution, at the Hague, visited Paris and Brussels in order to study the matter most thoroughly."

As a result of this investigation, he declared that the protection the government professed to give was "illusory,

did not protect, and afforded no security whatever against disease."

Blaschko, quoted by Dr. Kelly, says: "In Berlin, in spite of regulation, 20 per cent. of the men between 20 and 30 are infected each year with gonorrhoea."

Miereuel, another authority, says: "The more regulated prostitution there is in a country, the more prostitution of every kind will develop."

The American Federation for Sex Hygiene, in connection with the International Congress of Hygiene and Demography, held in Washington in September, 1912, had an exhibit of thirteen charts dealing with prostitution, regulation, venereal diseases, etc.

Chart XI had the following:

"The European countries are one by one relinquishing police supervision and the medical examination of prostitutes, on the ground that by these means and measures both prostitution and the spread of venereal disease have been furthered.

"The licensing of prostitutes has always, through the establishment of a false confidence, increased the danger rather than diminished the number of infections of those with whom these women associate. A public harlot may have been infected within ten minutes after receiving her certificate of freedom from venereal disease.

"As a matter of fact, modern methods of examination show that every prostitute shows distinct evidence of one or both of the two main venereal conditions, though she may appear well to the observer. Probably a thorough examination would show the same state of affairs in the men who frequent the public houses."

Chart XII read, in part, as follows:

"There is no large European city, except Hamburg, in which segregation now exists as an official measure.

"Government commissions have reported against the continuance of regulation, including segregation, in

England, France, Germany, Scandinavia, Denmark, Belgium and Italy."

Since 1891, Liverpool, England, has had no protected vice, and the authorities repress public violations of the law.

Manchester and London have no segregated district. England has awakened to the realization that its contagious diseases act increased the volume of vice and disease.

Attention is called to the valuable experience of Iowa.

Redlight districts were found in nearly all cities and towns prior to 1910. The Carson Law or the Iowa Redlight Injunction and Abatement Law, as it is called, was passed, and the day following, cities which had for 50 years believed prostitution necessary, found every house closed.

Many Iowans believed that the wiping out of the redlight districts would mean the spread of vice throughout the residential parts of cities.

After the law became effective, the change was immediate and for the better. As if by magic, prostitutes, thugs, criminals and redlight hangers-on disappeared.

In 1911, in the Register and Leader of Des Moines, the Assistant Chief of Police stated:

"It is not generally known to persons outside of the police department that in the days of the redlight district, when it was commonly believed that lewd women were segregated, not more than 15 per cent of the traffic was really carried on in the district. Everywhere in the city were disorderly houses. It was impossible to control them. The best evidence of the decrease in business is the fact that complaints from the residence districts have decreased at least 75 per cent."

Seattle, Los Angeles, Minneapolis and other American cities have abolished their red light districts.

Opportunity for graft where police espionage and medical examination

are legalized, was pointed out by the Vice Commission of Chicago in its preliminary report.

"The system of medical examination of prostitutes and the issuance of certificates of alleged freedom from venereal disease is a species of graft that should be eliminated. The Commission expects to show the following:

"That certain physicians catering to this class of patients make such examination and issue certificates, many of which they know to be false, and divide the proceeds with the dive-keepers. That in many cases the certificates are issued weekly without examination, and that the police in certain districts are in collusion therewith."

After a century of Napoleonic regulation, Prof. Fournier says that 13 per cent of men in Paris have syphilis.

By the Wassermann test nearly 100

per cent of cases of locomotor ataxia and general paresis are caused by syphilis.

Syphilis is responsible for 42 per cent of all abortions and miscarriages which are not induced.

Fully 75 per cent of all special surgical operations performed upon women are the result of gonococcus infection.

About 50 per cent of women infected with gonorrhoea are rendered sterile.

A large percentage of the blind, the insane and the feeble-minded owe their infirmity to gonorrhoea or syphilis.

In view of this slaughter of innocent and guilty, we concur with the recommendation of the Vice Commission of Chicago—"constant and persistent repression of prostitutes, the immediate method. Absolute annihilation the ultimate ideal."

M. E. V. F.

FOREIGN JOURNALS

Translated by Joseph Cuneo, M.D.)

ANEMIA OF ENTERITIS.

Anaemia is not rare among patients with enteritis, either acute or chronic, whether the patients be young or adult. This anaemia is usually met with in certain cases of choleriform enteritis when microscopical examination shows the presence of bacilli resembling coli b., paratyphoid, perfringens and enterocolic bacilli, and it may rapidly fall to 2,500,000 or even 2,000,000 red corpuscles. It is rather frequent in torpid intestinal conditions, muco-membranous enteritis, intestinal dyspepsia, typhlatoxy or typhlectasis, and then occurs in intermittent attacks appearing at the same time as an increase in the intestinal symptoms.

This anaemia, connected both with hypohaemataemia and with hypohaemoglobinemia, is frequently accompanied by subicterus, arterial hypotension, urobilinemia, but not by chol-

uria; the spleen is often hypertrophied and there may also be an increase in the size of the liver. One may easily understand why anaemias which have their origin in the liver with intestinal troubles and abdominal pains should be often mistaken for liver attacks, since both are characterized by the same discoloration to the skin and by an almost exactly similar localization of the pains.

Vomiting, however, as well as the pains spreading towards the shoulders and the urinary pigments are generally absent, and the condition is improved not by treating the liver, but by treating the intestine, a point of the utmost importance. The examination of the stools reveals a slight insufficiency in the transformation of protein; the bacteria most frequently found are, as already stated, perfringens, enterococci and coliform bacilli.

If we try to investigate the nature of these anaemias, we clearly realize that they are the result of a haemolytic process; still the resistance of the corpuscles is generally less, the auto-agglutination of the red corpuscles is absent, but the increase in the haemolytic power of the serum is almost constant. The haemolysis is therefore the result of an exaggeration in the destructive power of the serum towards the red corpuscles, and not of a weakness of the red corpuscles themselves.

If injected into rabbits, the serum of anaemic enteritic patients very often causes a diminution in the resistance of the corpuscles, and almost always a fall in the number of red corpuscles, this fall being much greater than with normal human serum.

The haemolytic substance is also hypotensive, since these patients have always a tension below normal; it passes in the urine, since the sediment of the urine experimentally produces hypotension and anaemia.

This substance, which is certainly organic, seems to be produced in some cases by the ferments which are absorbed all along the alimentary canal; in other cases by bacteria, namely perfringens and coli, the haemolytic action of which is well known; in other cases again by the hypersecretion of the intestinal cells or even by their destruction.

No doubt the bacteriolytic products play a prominent part in cases of acute enteritis; the products of a cellular origin, the cytolsins, have an importance which seems to be greater in chronic cases.

If extracts of the intestinal mucous membrane, and especially of the mucous membrane of the ileon and colon, are injected to animals, a distinct anaemia is produced; and the haemolysing action of these extracts is increased by addition of pancreatic ferments. Therefore the absorption by the inflamed human intestine of pancreatic ferments

and of intestinal products is an important factor of haemolysis.

In its normal condition, the liver prevents the haemolysing action of all these substances, but its stopping function is greatly disturbed in enteritis.

The above expose leads to the following practical rules in the treatment of enterogenous anaemia: disinfection of the intestine, even with lactic bacteriotherapy and aperients in small repeated doses; strengthening of the powers of the liver by salts of magnesia; increase in the resistance of the blood by lipoids and regeneration of the blood by calcium and iron products.—Prof. M. Locher, Paris, (*Le Progres Medicale*).

HOW OUGHT ONE TO PRESCRIBE BICARBONATE OF SODIUM TO GASTROPATHS?

Only moderate doses of bicarbonate of soda must be given; the dose of one drachm and a half is the maximum daily dose. Under such conditions the patients to whom this salt must be prescribed are those affected with disorders of gastric evacuation, and whose stomach empties itself too slowly. Late evacuations are met with in two cases and characterise two conditions. In the first case, owing to insufficient peristaltic contractions, the churning of the alimentary mass is too slow and insufficiently stimulates the opening of the pylorus. In the second case, the muscle has retained its normal tonus; but the contractions which it causes, however strong they may be, are only able to overcome very slowly the spasm which keeps the pylorus closed. In the first condition, the diminution of the secretion, hypopepsia, is parallel with the muscular atony; it is the condition of its evolution, and its very degree enables us to evaluate the degree of the gastric hypotonicity. In the other condition on the other hand, hyperpepsia is generally present and the higher its percentage, the easier and the stronger is the reflex occlusion of the pylorus.

Clinically gastric pain in itself seems to be a sign of abnormal evacuation, whatever be its form in the course of digestion or its conditions of time and duration.

For all these reasons bicarbonate of soda is indicated in a great many cases. Except in cases when there is an acute ulceration (haematemesis or melaena), and except in some cases of gastric cancer, its use may be freely recommended. It must be considered not so much as giving an immediate and temporary result, but as a regulator of gastric digestion. Therefore it must be given to prevent pain rather than to stop pain. This is why it seems rational to prescribe it in small doses repeated in the course of the same digestion.

The following combination seems to be the best to prescribe: sod. bicarb gr. xij, magn. pond., gr. iv; pulv. bellad. fol., gr. 1-6.

Patients with dyspeptic pains connected with motor insufficiency must take two of these powders an hour and half an hour before meals, and even half an hour and an hour after the same meal. Patients whose delayed evacuation is connected with a pyloric spasm, produced or kept up by hypersecretion, take these powders during the whole of their digestion, beginning an hour after the meal and continuing at intervals of an hour and a half until the next meal.

This *modus operandi* is to be preferred to Mathieu's treatment. Mathieu gives a teaspoonful of: Sod. bicarb., oz. ss; magn. pond., dr. j.

Bourget's mixture may also be prescribed; it is a solution of dr. ij of sod. bicarb., sod. phosph. exsic. dr. ss, and sod. sulph. dr. ss., in 1000 c.c. of water; 150 to 200 c.c. to be taken first thing in the morning as soon as the pain appears.

It may be advisable to bring the solution of sod. bicarb to about 100° F., since it is well known that fluids the temperature of which closely approaches body

are less irritating for the mucous membranes to which they come in contact.

In spite of all this and in spite of all the advantages of the alkaline treatment with bicarbonate of soda, it cannot be expected to work wonders even in the most suitable cases. A suitable dietetic treatment must by all means be prescribed at the same time. Even if this mode of treatment has to be prolonged as long as the pains persist, it is useless to reduce the dose as soon as the pains are less severe or less frequent; in other words, this treatment must be started at the same time as the dietetic treatment, but it must in no case be prolonged after the dietetic treatment has been stopped.—Dr. E. Binet, Vichy, (*Le Progres Medicale*).

EMESIS-PROVOKING COUGH IN THE TUBERCULOUS.

After prolonged and careful investigations on this question, Dr. Paillard has come to conclusions which are greatly different from the classical views.

About etiology, several factors have to be considered: 1st, the overloading of the stomach; big meals bring on Morton's cough, therefore the patient must be directed to adopt fragmentary feeding. 2nd, the fatigue after the meals; this cough is often met with among laborers, workmen, etc., but is not frequent among well to do people who can take a complete rest after the meals. 3rd, the period of the disease; Morton's cough is much more common in the first stages of phthisis. 4th, the localization of the pulmonary lesions; it is very common in the common phthisis of the apices, but very rare when pleurisy has already prevented the movements of the left side of the diaphragm. 5th, the "status dyspepticus;" this was considered by all the classical writers as an essential factor, but the author thinks it is a mere accessory, because it is often absent, and furthermore cough

is not at all constant in all dyspeptic patients.

There are three varieties of Morton's cough: the most typical is the variety which follows on the onset of phthisis; the cough of the later stages of the disease is less frequent, less regular, and more painful. Lastly, the variety which bears no relation to meals but occurs in the morning, especially in patients with pharyngitis, and is not at all special to consumptive patients. The author insists on the feeling of breathlessness which appears after the meals and before the cough.

The pathogeny of Morton's cough has been very much discussed, and the author discusses it again. He is in favor of the mechanical origin of this cough and shows how Peter's theory is vague and feeble. According to H. Paillard the vomiting is due, as in whooping cough, to the jolts and jerks of the cough, and in this respect he insists on the importance of the condition of the diaphragm in the causation of Morton's cough; experimentally he has noticed that the fixation of the left side of the diaphragm almost prevents vomiting; clinically he has seen that Morton's cough seldom occurs in patients whose left side of the diaphragm has been fixed by a former pleurisy. Conversely, consumptive patients whose left diaphragm has normal or exaggerated movements when breathing or coughing, are very often afflicted by the stiffness of the diaphragm and the "thoracic aspiration" (Arnozan) is deficient; in the second case, i. e., exaggerated movements, the stomach is directly injured and the 'thoracic aspiration' is maximum.

As to treatment H. Paillard recommends to give after each meal a few whiffs of oxygen; these inhalations may be repeated if necessary; they relieve the dyspnea which is so common after the meals and reduces the desire to increase the expansion of the thorax and diaphragm; thus the stomach is

given sufficient rest to exavuate its contents at a normal rate. This method, as well as the recommendations which we have seen about etiology, has given excellent results.—Dr. H. Paillard, (*Le Progres Medicale*).

TREATMENT OF PNEUMONIA.

Dr. W. Weitz has an article on the treatment of pneumonia by injection of Neufeld-Handel pneumococcus serum. Neufeld and Handel found in experimenting on animals that in pneumococcus infection, only large doses of serum could be depended upon in severe infections; small doses had little value for light infection. Therefore, they recommended that a large amount of serum be injected intravenously, as the subcutaneous method was proven to be too slow for the antibodies to enter the circulation.

The author reports 38 cases treated, three women and 35 men, by the intravenous method. The men were many of them hard drinkers; only two of the men were over 60 years of age; the others ranged at different ages in the middle period of life. The injections were made into the subcutaneous veins of the arm, after anaphylaxis was guarded against by ascertaining that the patients had never had serum injections before. The single doses of serum were from 20 to 30 c.c.; in some instances the initial dose was 40 cc. In three cases a single injection was given; usually two or three injections at 12-hour intervals; in some cases 10 or 12 injections were made. No harmful effects of the serum on the heart or lungs were observed.

The ordinary treatment of pneumonia was given in conjunction with the serum treatment. One patient was given the serum on the first day of his illness. In this case the dose was insufficient to prevent the quick rise of temperature after the initial fall from the injection; the temperature became normal on the fifth day of the illness.

In 16 cases the serum treatment began on the second day of the illness; 12 of these were abortive cases; temperature began to decline on the third day and was normal on the fourth. In two cases the temperature was normal on the morning of the third day, after a single injection of 30 c.c.; another after 20 c.c. as initial injection. The beneficial effect of the serum was especially noticeable in a man of 65 with a dangerously weak heart; a very adipose woman of 50, and a man of 57 with diabetes; in all three ultimate recovery took place.

Those cases only where the injections were begun on the second day ended fatally, and in this the postmortum showed the pneumococcus had disappeared from the blood, and marked destruction of the pneumococci in the affected lung. The serum in three of the second-day cases seemed to shorten the illness. In two of the cases where the treatment was begun on the second day,

it seemed to abort the disease; in a third day case exudative pleurisy developed. Other three-day cases, six of them, one died of streptococcic infection; four running a mild course. In eight cases treatment began on the fourth day; two died in which mixed infection was present. In five the temperature became normal on the fifth day of illness; that is, the second day after beginning of the treatment. Treatment was not begun after the fourth day. In five cases treated on the fifth day, four died; four of these were very severe cases. In two cases the treatment was begun on the sixth day—both fever free on the ninth day.

The author's conclusion is that the Neufeld-Handel pneumococcus serum injected into the veins, has a specific action in the majority of cases of pneumonia, and should be given an extensive trial in all early cases of pneumonia.—(Wien. Med. Klin. Woch., no. 26, 1912).

J. L.

PERSONALS

By the Editor and Associate Editors.

Dr. and Mrs. P. V. Carlin have returned from Honolulu.

Dr. C. L. Orr has removed from Colorado Springs to Alamosa.

Dr. G. C. Wilke has removed from Leadville to Fort Collins.

Dr. and Mrs. H. G. Wetherill have returned home from California.

Dr. D. H. Coover visited his son in California early in March.

Dr. O. M. Gilbert, of Boulder, has purchased a new Overland car.

Dr. Aubrey H. Williams has returned from a pleasant trip to Panama.

Dr. F. G. Schlosser has recovered from an operative case of appendicitis.

Dr. L. H. Kemble has returned to Denver after a visit to New York City.

Dr. T. Clarkson Taylor has been appointed county physician of Larimer County.

Dr. and Mrs. Madison J. Keeney of Pueblo spent the month of March in California.

Dr. and Mrs. J. A. Black, of Pueblo, passed the month of March at Hot Springs, Ark.

Dr. and Mrs. B. F. Replogle have returned to their home in Fort Collins from a sojourn in California.

Dr. Henry Pahlas and Miss Bertha Ping, both of Denver, were married on the last day of February.

Dr. Paul Newcomer, of Gillette, Wyo., has returned to his work from a three-months postgraduate course in the East.

Dr. Henry F. Hoffman, 324 Metropolitan Building, announces that hereafter his practice will be limited to orthodontia.

Dr. Robert Levy went to St. Louis the second week of March to read a paper before one of the medical societies.

Dr. Boswell P. Anderson has returned to his practice in Colorado Springs after a pleasant sojourn in southern California.

Dr. and Mrs. Frank W. Kenney have gone to California, where Mrs. Kenney will remain several months while the doctor makes a voyage to Japan.

Mr. John Anglum, Denver's pioneer druggist, died March 16, at the age of 70. He

had been engaged in the drug business in this city for 54 years.

We are pleased to note that Dr. L. B. Lockard has shaken off his appendicitis, at least for the present, and is able to greet his friends and patients.

The many friends of Dr. Edward Eckerson were grieved to learn of his serious vascular accident, and hope that he has many years of useful life before him.

Dr. James H. Potter, a Grand Army veteran and for many years a practitioner in Longmont, died at the home of his son in Denver, March 8, at the age of 70 years.

Dr. John A. McCaw announces that he will limit his practice to diseases of eye and ear. His offices are in suite 428 Majestic Building; hours, 9 to 11 a. m., 2 to 4 p. m.

Dr. and Mrs. F. G. McKlveen entertained the members of the Twentieth Century Club with a bountiful repast at the fortnightly meeting held on the evening of March 19th.

Dr. Nathan B. Newcomer, of Paonia, stopped off in Denver, the middle of last month, while on his way to Wyoming, where he is interested in a newly developing oil field.

According to the *Courier Farmer*, one of Dr. Hubert Work's 2-year-old Holstein heifers is producing 80 pounds of milk a day, which beats all the records for letting down.

It is announced that typhoid vaccine for immunizing purposes will be administered at the Denver city hall to such persons as do not feel inclined to pay a physician for this service.

After 25 years of faithful service as superintendent of the Fremont County farm and hospital, Dr. M. C. Durning has retired from the position, to be succeeded by Mrs. Dorothy Stevens.

Gov. Ammons has appointed as members of the state board of health, Dr. L. G. Crosby, of Ouray; Mr. A. W. Scott, a druggist of Fort Collins; and Mr. H. F. Merryweather, a sanitary engineer of Denver.

At the thirteenth annual meeting of the staff of the Mercy Hospital, on the evening of March 13th, Dr. Frank W. Kenney was re-elected president, and Dr. George A. Moleen was chosen secretary.

Dr. J. M. Perkins and Dr. Wm. H. Sharp-ley are candidates for Commissioner of Social Welfare at the coming election. It would be difficult to find men more and better qualified for the position.

We regret to record the recent death of Dr. P. F. Gildea, who had gone to California in hope of bettering his health. Although only 48 years of age, Dr. Gildea had for some time been markedly arteriosclerotic.

Miss Carol Louise Monismith arrived at the home of Dr. and Mrs. A. T. Monismith, of Fort Lupton, on the first of March. The young lady was arrayed only in a smile, but a full assortment of long dresses awaited her coming.

Dr. and Mrs. H. G. Wetherill will leave Denver the latter part of May and go to England, where they will spend the summer partly in a touring car. The doctor also expects to "take in" the chief British surgical clinics.

Dr. H. G. Maul, who for the past two years has been pathologist of the Nebraska State Insane Asylum at Ingleside, has returned to Denver and taken offices at 212-214 Mercantile Building, where he will devote his time largely to laboratory work.

Dr. Mary A. Ingersoll, one of the leading homeopathic practitioners of this city, died on Easter Sunday from heart disease supervening upon la grippe. She leaves a husband, Dr. Luther Ingersoll, a son and a daughter to mourn their loss.

Dr. Bulkley will give weekly clinical lectures upon surgical diseases of the skin at the New York Skin and Cancer Hospital from April 2 to May 7 inclusive. On May 14 Dr. Bainbridge will lecture upon the surgical treatment of malignant diseases.

Dr. T. E. Carmody gave an interesting talk upon the indications and technique of tonsillectomy, at the March 18th meeting of the Medical Society of the City and County of Denver. Venous oozing, said the speaker, can usually be forestalled by thorough irrigation with hot boric solution.

Mr. Edward F. Trunk, for 20 years a prominent druggist in this city, died from angina pectoris, March 22, at the age of 51 years. Mr. Trunk was a man of strong convictions, loving his friends and hating his enemies. It was part of his religion to fill prescriptions exactly as written or not at all.

Dr. Arnold Stedman, for 43 years a medical practitioner in Denver, died suddenly, presumably from a heart lesion, while calling upon a patient, on the morning of March 22d. Dr. Stedman was 74 years old at the time of his death, and was almost the last of the pioneer physicians of this city. He was universally respected and esteemed.

The Henry Phipps Institute of the University of Pennsylvania for the study, treatment and prevention of tuberculosis, corner of 7th and Lombard streets, Philadelphia, is now almost ready for occupancy. The building is not only a model one of its kind, but the institution promises to be of great service in promoting original work along the lines suggested.

In spite of the utmost highly organized efforts of the "League of Medical Freedom" (alias the monetary hierarchy known as "Christian Science"), the bill for the compulsory notification of tuberculous cases has become a law by receiving Governor Ammons' signature. It is pleasant to have again a governor with a real backbone, and not a mere political measuring tape.

We learn from the daily press that the sanitary rule hitherto enforced in Denver, requiring that school children who have been absent from the public school for three days should be inspected at the city hall before being allowed to return to school, will not be enforced hereafter in such cases as have a certificate from the family physician stating the cause of the absence to have been a non-quarantinable disease.

The American Association of Orificial Surgeons will hold a spring clinic in the surgical amphitheatre of Hering Medical College, corner of Wood and York streets, Chicago, April 23-26. Dr. E. H. Pratt and assistants will demonstrate the fundamental principles of orificial surgery, as well as other non-medicinal therapeutic measures, such as abdominal calisthenics, high frequency treatment of internal organs, spondylotherapy, etc.

"You are cordially invited to attend a complimentary dinner to be tendered to Dr. William J. Robinson, in recognition of his public activity as writer and lecturer and in celebration of the tenth anniversary of the foundation of *The Critic and Guide*, on Friday evening, March seventh, nineteen hundred and thirteen, at seven o'clock, at the Hotel St. Denis, Broadway and Eleventh Street, New York City. Dr. A. Jacobi, Dr. Willy Meyer, Hon. George McAneny, Dr. James P. Warbasse, Mr. J. G. Phelps Stokes, Mr. A. Bancroft Firmin, Dr. A. L. Goldwater, Committee. Dr. A. Jacobi will act as toast-master."

LARIMER COUNTY MEDICAL SOCIETY'S REGULAR MEETING, MARCH 5, 1913.

Met in the Y. M. C. A. Building. There were present, Drs. Hoel, Dale, Kickland, Taylor and Stuver. The minutes of the last meeting were read and approved. A letter was read from the Committee on Red cross Medical Work of the American Medical Association, requesting that our society appoint a committee of five, of which the president and secretary shall be ex-officio members, to assist or cooperate with the Red Cross in rendering assistance in case of local emergency or disaster.

It was moved by Dr. Kickland and seconded by Dr. Dale and unanimously carried that such a committee be named and that the president appoint the other three members. This he did and the committee for the Larimer County Medical Society consists of Drs. Kickland and McHugh of Fort Collins, J. G. McFadden of Loveland, and Dr. Hoel, Pres., and E. Stuver, Secy. The application of Dr. C. F. Wilkin of Laporte for membership in the society was then presented, and he was unanimously elected a member.

Dr. Taylor then presented his subject for the evening: "The Prescription Files." He had examined the files of two of the leading drug stores to find out the extent to which proprietary preparations were being prescribed by the physicians of Fort Collins. He found a large percentage of such prescriptions, and in the case of some of them pointed out evils both to the profession and the public of such prescribing. The paper was commended and discussed by all the members present.

Adjourned.

E. STUVER, Secretary.

WHAT IS SUCCESS?

"To make a happy household clime for bairns and wife"—that is success.

To be busy at congenial tasks, and therefore contented—that is success.

To know the human mind and body as the master knows his violin—that is success.

To grip and wrestle with Old Man Death and get the better of him, even though it be but for a few short years—that is success.

To speak the truth, to do the right, to aid the weak, to fear no man, to owe no man, to envy none—that is success.

BOOKS

Handbook of Diseases of the Rectum. By Louis J. Hirschman, M. D., President of the American Proctologic Society, Lecturer on Rectal Surgery and Clinical Professor of Proctology, Detroit College of Medicine. Revised and re-written second edition. 338 pages. Royal Octavo—12 illustrations—including four colored plates. Price, \$4.00.

The first edition of Dr. Hirschman's book met with a hearty reception at the hands of the medical profession. The present edition has been entirely rewritten, forty new illustrations, including two colored plates, have been added, and the entire book has been reset. This is pre-eminently a book for the general practitioner. It is written in the hopes that this class of the medical profession will arouse themselves to the possibilities of this line of work and not allow the charlatan and the advertising quack to take from them work which can be done by the legitimate practitioners of medicine. To that end special attention has been paid to office work in rectal diseases and the part that anesthesia plays in this class of work.

The Practice of Urology. A Surgical Treatise on Genitourinary Diseases, including Syphilis. By Charles H. Chetwood, M. D., LL.D., Professor of Genitourinary Surgery, New York Polyclinic; Visiting Genitourinary Surgeon to Bellevue Hospital, etc., etc. One volume of eight hundred and twenty-four pages, large octavo. Profusely illustrated by line and half-tone cuts, and by six full-page colored plates. Muslin, \$5.00 net; half-morocco, \$6.00 net. Wm. Wood & Co., Publishers, New York.

Chetwood's "Practice of Urology" is founded upon over twenty years of specialized experience, and embodies much that is original, in addition to a well rounded exposition of the theme as a whole. The newer topics, such as cystoscopy, functional renal diagnosis and serum diagnosis and serum therapy, are given particular attention. The latter portion of the text is taken up with a practical consideration of syphilis and its modern surgical treatment. The author is a terse and lucid writer, and the most important data of each subject are emphasized to the eye by being printed in

bold type. The most pleasing feature of the volume is the great number of artistic and accurate illustrations in black and white and in colors. General practitioners as well as genitourinary specialists will find this work very helpful and satisfactory.

Skin Grafting. By Leonard Freeman, Professor of Surgery in the Medical Department of the University of Colorado; Surgeon to St. Joseph's Hospital, National Jewish Hospital, and City Hospital, Denver, Colorado. A book designed for Surgeons and general practitioners; 139 pages with 24 illustrations. Published by C. V. Mosby Company, of St. Louis. Price, \$1.50.

This work covers the subject of Skin Grafting, giving the technique in detail of all the different methods, the dangers and after care. Chapter IV is especially interesting, as he takes up the method of Thiersch in great detail. He also has a chapter on the transplantation of mucous membrane and a brief comparison of different methods.

F. M.

Diseases of Children. A Practical Treatise on Diagnosis and Treatment for the Use of Students and Practitioners of Medicine. By Benjamin Knox Rachford, Professor of Diseases of Children, Ohio-Miami Medical College, Department of Medicine of the University of Cincinnati; Pediatrician to the Cincinnati Hospital, Good Samaritan and Jewish Hospital; Ex-President of the American Pediatric Society and Member of the Association of American Physicians. D. Appleton and Company, New York and London, 1912.

This book more than fulfils its claims as a practical clinical treatise on diseases of infants and children. It covers every phase of the subject clearly yet concisely. It is exceptionally well illustrated, including many radiographs.

The only part of the book that is voluminous is the index, which is a virtue rather than a fault, since it provides ready reference for the busy practitioner. The author's experience has undoubtedly been a wide one. The chapter on Infant Feeding is especially good, and includes reference to all the recent splendid work done by the German School of pediatricians.

For the general practitioner and for students in medicine, it would be difficult to imagine a more useful and satisfactory work.

F. P. G.

Muscle Training in the Treatment of Infantile Paralysis. By Wilhelmine G. Wright, Boston Normal School of Gymnastics, 1905. Reprinted from *The Boston Medical and Surgical Journal*, Vol. clxvii, No. 17, pp. 567-574. Oct. 24, 1912. Price, 25 cents. W. M. Leonard, Publisher, 101 Tremont St., Boston, Mass.

The demand for light upon this subject exhausted the file of the *Journal* in which it was printed and has led Dr. R. W. Lovett and the *Medical Journal* to re-issue the article in form of a thirty-two page reprint at the nominal price of twenty-five cents. The directions given are explicit and make the reprint not only of great value, but practically the only set of definite directions in the treatment by exercise of conditions following paralysis.

Surgery, Gynecology and Obstetrics.—This journal has become undoubtedly the greatest of its kind in the world. It is now the official journal of the Clinical Congress of Surgeons of North America. The February issued contains not only 232 pages of the usual beautifully illustrated original matter, but has also 128 pages of abstracts and bibliographies. It is the first periodical in the English language to publish a complete international abstract of surgery. After May 1st all subscribers in this country will pay \$10 per annum.

The trustees of the National University of Arts and Sciences of St. Louis announce that a contract was signed on February 21, 1913, for the building of \$5,000 worth of apparatus to use in the physiology laboratory of the medical department (American Medical College) of the University. Dr. Bernard Blass, formerly of New York City, has been elected professor and head of the Department of Physiology, and will assume this position with the opening of the session of 1913-1914.

MISCELLANY

Cough of Phthisis.—In the treatment of pulmonary tuberculosis the mitigation of cough is frequently of prime importance, since the repeated effort to expel accumulations of perverted secretion or suppurative materials is often of such degree that pleuritic pains are intensified and the patient is reduced to a state of extreme weakness. Furthermore, the interruption of sleep caused by frequent acts of coughing invariably bring about a marked depression of the vital forces.

The systematic administration of an agent which exerts a sedative influence upon the respiratory tract, modifies the pulmonary accumulations and invigorates the expulsive act is usually expedient, for the reason that the comfort and general well-being of the patient is substantially improved by such a course. It is, however, judicious to avoid the administration of any drug which is capable of producing by-effects that are detrimental, in any way, to the welfare of the patient. It is particularly important that the use of drugs which cause digestive disturbances, constipation or addictions should be eschewed, for such drugs always interfere to a very considerable extent with reparative progress.

Glyco-Heroin (Smith) is singularly serviceable in the treatment of cough of phthisis, since, while possessing extraordinary cough-ameliorating, dyspnea-relieving, repair-promoting, sedative and expectorant properties, it is completely incapable of producing the slightest untoward effects.

Durbin Disposes of Dental Supplies.—The J. Durbin Surgical and Dental Supply Company of 1508 Curtis street, Denver, and 25 West Broadway, Salt Lake City, has recently disposed of the dental supply department in the Denver office. This was done in order that they can give more space and time to their increasing business in surgical instruments, hospital supplies, and kindred branches. The Salt Lake office continues to handle dental supplies as heretofore. Larger and more varied lines of surgical instruments, etc., are being added to the Denver stock, making it the most complete of its kind west of Chicago.

"Will, Missus Mulcahy, Oi see be th' papers Danny's discharged from prison," observed Mrs. O'Hooligan.

"Yis," sighed Mrs. Mulcahy, "Danny niver could hold anny koind of a job."

Utah Medical Journal

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NOTICE.

Owing to the illness of Doctor Frederic Clift,
Editor of the Utah Medical Journal, several original
articles, editorials and other matter are unavoidably
held over.

DEPARTMENT OF EUGENICS

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SOME CHILDLESS WIVES.

G. HENRI BOGART, M.D.,

Paris, Ill.

Barrenness was once woman's most dreadful fate, back in those days when "Go ye forth and replenish the earth" was spoken, and thence to the pioneer days when the family greeting to the bride and groom, as they turned from the altar was "May you live long, prosper, and have big babies." And the big babies were an elemental part of the prosperity, for each boy and girl was a valuable asset in the earlier days of the pioneer. It was a disgrace, or at least a misfortune, not to have children. But the old order changeth, and instead of a dozen or more olive branches the family of one and two became more frequent than greater numbers.

At the same time the long rows of tiny tombstones in family burial lots are no longer common.

Prevention of pregnancy became more common and by the crudest methods. Vaginas were tanned into leather by astringent douches and washes. Fallopian section as a preparation for marriage was resorted to. It was to this illicit operation, indeed, that the world is indebted for the boon of sterilization by vasectomy.

Thus was repeated the truth of that age old truism told in Samson's riddle, "Out of the eater came forth meat, but of the strong came forth sweetness." Some of these women have later come to know the holy desire for maternity,

and have come begging oh, so piteously that the severed tubes be reunited, but I have never known the operation successfully performed, either in the male or the female.

There are some of these women who had contracted loveless marriages, mere sexual partnerships for reasons of finance, social position, or other conventional cause, who have later developed love and affection strong as their nature will admit. These women, invariably desire to bear a child for the husband who later became a lover.

The relation between love and sexual desire is dual and in its better phase is little understood. Sexual desire does lead to attachments between man and woman. On the other hand, love for a man instinctively prompts a normal woman to wish to mother his child.

From all this generalization I desire to report a case of an entirely different kind, one in which the woman desired motherhood for financial reasons. After correspondence I met her at a hotel in Indianapolis. She had written for me to meet her at a certain date, in her home city, but had fixed a time when I would be in attendance on a convention, and I so wrote her. The morning of the convention I had not been in the lobby of the hotel where our association foregathered, for fifteen minutes until I was paged out. She was in the city, waiting me at an-

other hotel. Angered, I sent her messenger back with a note making an appointment for 8:30 in the evening. My cavalier treatment resulted partly from resentment that she had presumed to come on for consultation regardless of my convenience, and partly because of disgust for her mercenary reasons for desiring maternity.

A childless uncle wished to make her husband his heir, provided there were children to perpetuate the family, otherwise another nephew was to inherit it. She was anxious that the money should come to her husband. When I came to her room, I found her a magnificent Jewess married at sixteen and now thirty. She had brought written reports from examinations of both herself and her husband.

A careful reading of these reports convinced me that neither partner should be sterile.

For a long time I talked with her hoping to stumble on to a solution. Finally I learned that orgasm occurred much more quickly and forcibly with her than with the husband. This, with a sharply acid reaction of the vaginal secretions offered a possible answer. At orgasm the uterus after its usual suction action, would close firmly and exclude the semen ejaculated later, while the acid secretions would kill the spermatozoa, before admission to the uterus was possible.

I explained this to her and advised that she procure a bivalve speculum and a long smooth syringe. Before coition thoroughly cleanse the vagina with borax solution. Then after intercourse the speculum was to be introduced, the semen taken up in the syringe then injected into the uterus. I insisted upon the speculum, and also that in the first instance the husband should have his physician demonstrate its use, as there are many fatal terminations to attempts at lay introduction of probes, lead pencils and syringe noz-

zles into the uterus, which instead puncture the culdesac.

She was much impressed with the idea, but demanded to know as to its use, "What do your books say?" I had to tell her that my advice was not from literature but from reason, and pressed for an answer told her of Zola's novel, "The Son of a Gun," founded on a similar condition. She wanted to know if such operation had ever really been done, and I told her that every expert horse-breeder in the land kept and used an "impregnator."

Then she was angry, gloriously, imperiously angry, because I had compared her to a beast, a brute! It took some time to pacify her—I added ten dollars to my fee because of her temper—but when she did understand that no offense was intended, she apologized.

She wrote me that pregnancy followed in six weeks treatment, and when in due time the child was born, the parents sent me a handsome honorarium.

Since I have considered similar treatment for some other cases in which there is no other adequate reason for the sterile condition, here arises a delicate, a very delicate question:

If the semen from another man be used, is it more culpable to inject it in the usual manner than with a syringe?

In the instance cited in a former paper of this series, the husband was impotent, or rather sterile. In such cases would the woman be justified in resorting to mechanical impregnation? Would it be permissible for a physician to secure semen by milking a prostate and then injecting it?

In the novel by Zola, aforementioned, the priest furnished the semen to the physician, the woman was impregnated, and the plot hinges on the question of the child's legitimacy. By the way, the Jewess is now pregnant with her third child, according to a recent letter.

EUGENICS AND CHILD WELFARE*.

JOHN D. TRAWICK, M.D.,
Louisville, Ky.

Child welfare begins with the eugenic idea.

"A nation is composed not of property nor of provinces but of men," and there can hardly be a nobler ideal than to so attend to the carrying forward of the divine command to go forth and multiply and replenish the earth as that there may be a fit race produced.

Posterity is left to us by our progenitors, and unless we deliberately select the worthy for parents of the coming generation, rejecting the unfit, not as individuals, but as parents, we shall most certainly breed for posterity evils that can be named but not numbered.

Eugenics stand for the principle that the right child shall be born. Heredity and environment determine the human character and life. Eugenics stands for the principles of heredity, and all there is involved in the campaign against infant mortality stands for the environment of the child. Therefore we see at once the compatibility of eugenics and child welfare.

The time for the question to be raised that eugenics asks is before the union of the parent cells to form the new individual. At the moment, however, of conception, eugenics joins forces with all that resists infant mortality, for with the fusion of unit cells individual character has begun, and if the eugenicist should then raise his voice and say this new individual shall not be born, he becomes at once as those who would advocate child murder. At that fusion time then eugenics is too late.

Mendel's Law. For a more comprehensive understanding of the effect upon the human individual of the principles of heredity in his physical, mental and moral nature, we are indebted to Men-

del and the law he has discovered. Perhaps no science in modern times has attained such deserved prominence as that named by Galton and which has for its most inspiring principles those outlined by Mendel in his manipulations of plants and flowers. The determiner in the protoplasm of the parent cell fixes the character of the offspring, and a trait or character in the progeny is there by virtue of the unit existing in the parent cell. For instance, one of Mendel's peas was tall or dwarf if there were present or absent respectively in the protoplasm of the parent cell a determiner for that character.

Special stress then must be laid upon the determiner, or unit character of the cell, for it is here that we reach the essence of heredity in the individual. The unit character remains the same throughout successive generations whatever the associations may be from generation to generation.

Mendel's Law and Human Character. As applied to the human individual there arise limitations due to our lack of knowledge as yet of the component elements of human characters or traits. Mendel's law applies to unit characters, and most human traits are complex, that is, not a single unit but made up of many units.

Therefore until our research has gone further and we are better able to analyze human characters we cannot claim entire adjustment of Mendel's law to the ramifications of all human traits.

But even in the present state of our knowledge we are undoubtedly helped to a clearer understanding of problems heretofore unsolved, or explained on purely empirical grounds. Stu-

*Read before the Kentucky Child Welfare Conference, Louisville, and republished from the Louisville Journal of Medicine and Surgery of January, 1913.

dents of biology and human conditions, thoughtful observers everywhere, have recognized the need for a clearing of the field such as is now obtained through Mendel's law.

Eugenics seeks to anticipate the union of parent cells and to so influence that union that there may be therein contained those determiners which may produce an individual who shall possess unit characters making for worth and fitness—strength and not weakness—dominant types for good to breed true without recessive taint. Let there be made, therefore, a deliberate study of all the conditions existing in the social economy that make for unfit marriages, for by selection of parenthood we are going back to the pre-conceptional era of the child and are at least preparing ourselves to say negatively what shall not constitute parenthood for the race unborn.

We are not disposed to eliminate from our reckoning all the influences of moral force nor to forget that there is a divinity that shapes our ends, but we cannot hope, by nurture, or by education, to be able to create new germinal types. We can only, by selective environments, hope to obtain the types most conducive to racial welfare.

For the present discussion a brief inquiry into some of the known causes that unfit men and women for parenthood may be worth while. Syphilis undoubtedly affects cell protoplasm in such vital way that progeny, as well as parent, are maimed and killed. How shall we answer for the dreadful fact that in the institution of marriage, intended primarily to save society, this disease works its most dreadful scourge. The man who has become infected by illicit commerce in prostituted virtue brings into the married state his disease, and children may be born either dead in the moment of birth, or cast off, having succumbed in the earlier embryonic state, or, alive, probably maimed in every sense for

life. The majority of children thus born die in the early periods of life. More than this, the deadly taint goes deeper. His mate may become infected and she must suffer in legal wedlock, most times ignorant of the nature of her disease, paying a penalty which the husband alone should have paid for his illicit relation.

The spirocheta pallida, now known to be the specific cause of syphilis, can be demonstrated in the infected embryo. The maternal organism may become infected through the child, in utero, and both mother and child be made to suffer. The child thus born with prenatal infection, if by rare chance it live to the age of parenthood, can yet convey the disease to the next generation. Beyond this scientific data is insufficient to warrant the statement that actual syphilitic disease may be transmitted, but none will deny that the vitiation of cell protoplasm will go on.

Therefore, eugenics calls aloud with all the other forces working to wipe out prostitution and clamors for no more violation of the holy bonds. The syphilitic before marriage, who may yet harbor the disease, should be prevented from assuming the relationship on the same grounds that would bar any other unfit individual, if for no other cause than that in his impurity he cannot hope for an untainted offspring. The post-connubial syphilitic needs to have driven home to his consciousness the penalty he must pay in years of anxious dread lest he may yet become the father of a dead child whom he has murdered, or the life partner of the woman whom he has sworn to cherish but whom he has most grievously violated.

The Alcoholic, into whose organism the poison has so permeated that even the cell structures themselves contain alcohol, cannot by any possible means hope to be a safe progenitor. The British Royal Commission asserts in

brief that once an individual has reached the point of chronic alcoholic saturation the tissues remain permanently tainted with alcohol and can never be pronounced free. Alcohol in one or both parents exerts its influence mainly by impairing the vitality of the child. While it has not any special tendency to beget a proclivity for drunkenness in the offspring, yet in the manner indicated it has distinct influence in the promotion of loss of moral control, the production of feeble-mindedness and epilepsy.

Eugenics seeks to prevent the debauchery of the child, hence stamps the alcoholic as unfit.

Gonorrhea is a distinctly anti-eugenic fact, and those of us who advocate so earnestly the rights of the child must join hands of ready sympathy in the efforts to prevent child blindness. This disease has its eugenic bearing in the effects seen in the ravages upon infected wives and mothers. Thousands of hopeful wives have had their earliest hopes blighted by the infection produced by husbands "who thought themselves cured."

These wives and mothers may be eminently fit to produce worthy children, but by the infection they have been prevented either by the blighting effect of the disease produced upon the organs of generation, or have suffered surgical misfortune, the direct result of infection from the husband.

Since, therefore, it is the part of the plan of eugenics that motherhood be protected and conserved, and that no infant shall suffer, we protest most strenuously against marriage or parenthood for the gonorrheal because he may not only cause disease and suffering in his wife, but blindness in the offspring.

Eugenics stands aghast at the menace of the feeble minded. The present state of institutional care of these deficiencies seems anomalous. Yet we must not be understood as declaiming

against institutional care of the most painstaking kind for these unfortunates. Under existing limitations and regulations, after a more or less lengthy detention of the known mentally unfit, some must be discharged and sent away in order that room may be provided for others needing to be cared for. The facilities demand this.

These "cured" are sent out into society. The bodily nourishment may have been improved, even the mental horizon rendered less obscure, but has the determiner in the reproductive cell of that unfit one been changed? Granted that feeble mindedness be not a simple trait but a complex association of characters, in which each unit character follows its own road to the Mendelian goal—this fact remains unchallenged, that the unit character in that individual's reproductive protoplasm has not been eradicated. The germinal type is still the same. We have agreed that his unit character is the essential part in heredity, therefore must we urge that neither moral control nor improved physical condition has removed from this person thus released the stamp of unfitness. He is at large and a potential producer of progeny who, like himself, must ultimately return to the care of the State—a feeble-minded ward.

Not alone are these so-called cured feeble-minded in such large proportions loose in the community, but there remain that majority well known to exist by every investigator, never at any time confined or segregated in any manner whatever. The menace thus becomes terrifying. But add to these facts the known rate of productivity of the feeble-minded type and our problem becomes gigantic. An investigation in Great Britain has recently disclosed the fact that the average number of children in the families which use the public schools is about four to the family. Whereas in the degenerate families whose children are

sent to the special institutions for their care, there was an average of seven and three-tenths children per family, not including the still born, a number sufficient to bring the total up to practically double the average number of children in normal families.

Therefore eugenics insist upon a close segregation of these unfit that the very forces of natural selection may gradually eliminate the degenerate strain. These must be denied parenthood. Segregation seems to be the measure of prevention, but there is the fact of the enormous expense to the state of institutional care of a host increasing every year, from such excessive reproductive rate. Therefore sterilization of the reproductive power is being introduced. Prophylaxis by mutilation must stand as a last resort, and only until a better one is found, to be utilized only in the case of the hopeless kind, and then after judicious precaution. By the term hopeless, we mean those who possess no unit character potential for ability.

Goddard's study of the Kallikak family proves that had vasectomy been employed perhaps the state would have been deprived of normal citizens who were able to offset to some extent the economic cost of the unfit descendants.

Motherhood: It is well to turn away from the review of this gloomy horde, passing by in silent tread, keeping step to the dead march of racial hope. The syphilitic, the blind and maimed from gonorrhea, the alcoholic, imbecile, criminal, epileptic, feeble-minded—these who can but reproduce what has been born into them—unfitness. We human-kind must leave them to the tender care of the Healer by Gennesaret; their hope lies in Him.

There is a brighter view; let us go up, love leads the way. Most gently would eugenics throw a protecting arm about the children of all the races, and draw them to her breast, to whisper to them all the secrets that they should know;

to prepare them for parenthood, then proclaim so that all men shall hear—that Motherhood Must be Exalted in the Land.

Here we find the heart of eugenics pleading for a nobler race—worth instead of unfitness, ability not weakness—a dominant strain for superior attainment, not a recessive to vice and crime and death.

Such children can be born, but they must be born of a woman. The physical fact asserts itself and cannot be confused with any issue however full of sentiment. If infant mortality is to be checked, there is no more potent factor to be reckoned with than a healthy mother. There is no appliance or institution that can supersede her. Every institution aiming at child welfare seeks to conserve to the child fit motherhood and resists any instrument or procedure that deprives it of a mother's care. There is scientific truth in the statement that if motherhood be exalted in the heart of men prostitution would cease.

"We maids would far, far whiter be
If that our eyes might sometimes see
Men, maids in purity."

If there be a social realization of the biological truth that taint in the unit character of the parent cell is destined to produce its expression of taint in the off-spring, certain to do so if both are tainted, there will then be thrown the responsibility equally upon the parents for maintenance of the pure strain.

The moral effect of such realization would be as real as the social, the man's responsibility be fixed, so that woman need not continue to cry

"Woe to him that cunning trade in
hearts contrives.

Base love good woman to base loving
drives.

If men loved larger, larger were our
lives,

And wooed they nobler
Won they nobler wives."

Finally, the conclusion is inevitable Eugenics urges that to understand all that child welfare means we must go back to the unit of characters in the protoplasm of the producing cells. Selection of parenthood means that the progeny is to contain the determiners for ability. Morally, socially, physically, biologically the man is as responsible

for the maintenance of the parental ideal as is the mother who bears and rears the child.

"Then comes the statelier Eden back to men,

Then reign the world's great bridals.

Then springs the crowning race of humankind—

May these things be!"

Recent Progress in Medical Renal Diseases.—Under this caption Cecil K. Austin (Medical Record, Jan. 4) reviews the marked practical advances in the diagnosis and treatment of medical nephritis made in the past ten years, and particularly those accomplished by certain young French scientists (Widal and Castaigne), whose investigations are hardly yet to be found in the English language. They have put aside the old anatomic classification of nephritis, and divide the subject into four types: albuminous, chloremic, uremic and cardiovascular—these four being susceptible to a variety of combinations. The albuminous form per se shows a plus defect in the renal filter, allowing the albumin of the blood to escape into the urine, and unless combined with one or more of the other types, or with renal impermeability (shown by injection of methylene blue or other indicator), is not for the present a very serious matter, and the patient can be allowed wide liberty in diet. The chloride retention form of nephritis is readily differentiated by urinary tests together with a knowledge of the amount of salt taken. In this common form the patient may show much albumin with more or less edema, and there may be headache, dyspnea, nervous symptoms or convulsive attacks; the test with methylene blue is normal or even plus, and cardiovascular signs are absent. This patient should receive plenty to eat, but only articles containing a minimum of salt, "such as meat, fresh-water fish, eggs, dried leguminous vegetables, cereals, herbaceous vegetables, fresh milk and fresh cheese, and a variety of minor substances for seasoning." After a few weeks, the patient can usually be allowed a weighed ration of 2 or 3 grams of sodium chlorid daily. "Nothing can be more gratifying to the practitioner than the way in which a typical case of

this category reacts to intelligent management. Such a patient, with proper handling, will in a few days' time pass from a water-logged condition with headache, dyspnea and vomiting, to one of comparative comfort in which he can confidently await a gradual return to relative health." The uremic form (excess of urea in the blood, spinal fluid or serious effusion) is diagnosed with certainty by estimating the percentage of urea (normally 0.15 to 0.5 cgm. per liter of serosity) in the blood serum (10 c.c. required) or serous effusion. One or two grams per liter denotes a serious condition, while with from two to four grams the survival of the patient is a question merely of a few weeks or months. The diet of these truly uremic patients should consist of nothing but sugars and starches. Such subjects seldom show any edema whatever. The fourth, or cardiovascular, type is the most familiar. Renal insufficiency (formerly termed uremia) may be either dropsical (chloremic) or dry (uremic), the latter form being much more insidious and dangerous. The main clinical symptoms of this type are a water urine containing a low percentage of albumin, loss of appetite, cerebral torpor, pruritus and retinitis. For true uremic insufficiency it is well to give the Guelpa cure for two to five days; that is, an absolute water diet, with or without lactose, and each morning brisk purgation—natural purgative water if no accompanying chloremia—otherwise scammony, calomel or other non-saline purgative. This can be followed for a few days by a grape cure—2 or 3 kilos of ripe, sweet grapes per 24 hours. At the conclusion of this stage, the glyco-amylaceous diet should be gradually established, and the relatives should be warned as to the probable duration of life.

Nevada Medicine

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GEORGE L. SERVROSS, M.D., Gardnerville, Nevada.

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WHY THIS LONG SILENCE?

At the metenig of the Nevada State Medical Association, regardless of the fact that Nevada Medicine made a proposition thereto to print the transactions thereof, such contract was given the California State Journal of Medicine. That meeting was held the 10th, 11th and 12th of October. Since then, and at this writing, the November, December, January and February numbers of the latter journal have appeared, with absolutely nothing in any of them from Nevada, barring a brief item that the Association had met. Owing to an accident to the State Secretary, shortly after the meeting, we did not anticipate much, if anything in November, but we did expect something in December and January at least in February. What is the matter? Is Nevada inconsequential in the eyes of the editor of our sister journal, or has he insufficient space for both California and Nevada?

When Nevada Medicine proposed to print the transactions it likewise proposed to keep its promise to the letter, and today, instead of nothing, you would have had before you not less

than four papers read before the Association, as well as notes of other happenings at the meeting. It was our intention to have published two of the papers in our initial issue in December, and one or two every month thereafter during the year. This would have made Nevada Medicine truly a Nevada journal and she would not, as has been the case, in order to fullfil her contract to her readers, have to have gone outside the state for a single inch of copy. It was, and still is, our intention to do all in our power to increase interest in all organizations within the state, both county and state, and despite the fact that we, an organ published in the interests of Nevada, was shelved by the Association, it has not abated our interest therein, not a single iota, nor will it. We believe in the Association in every particular.

Recently, because of the inattention of our sister journal to Nevada, we have proposed to the officers of the State Association that they give us these transactions, in that they may be published, and we have further proposed such publication, during 1913 without a single cent of cost to the As-

sociation. We, as much as you, desire that Nevada not be left behind a cloud and are willing to do all in our power to bring her out of possible obscurity. We ask that the individual members of the Association insist that the transactions be published, and that immediately, whether in Nevada Medicine or not, and if the California journal cannot spare us the space, we of Nevada Medicine stand ready to fill the breach.

IN RE OUR INVITATION.

Did you gentlemen of Nevada notice our Invitation in the January issue of Nevada Medicine? If so, why have we not heard from you, and in way such as to make Nevada Medicine a real Nevada medical journal? Don't you like us, or what is the trouble? We want to know and we want you to tell us, personally, if you please. We want to give you a publication which will act to reflect the greatness of Nevada and her doctors. We cannot do this, however,, without "copy" with which to fill our pages, as a journal without reading matter, relative to the subject in hand, is worthless. We have gotten contributions from sources outside Nevada, and are promised more, but we do not care for such if we can fill our pages with material from our Nevada brothers. We know that a vast amount of work is being done by our 144 doctors and that, in addition, everyone of you has something of a clinical nature to report. We know something of the sort of work which is being done in our metropolis, Reno, and that it is of as high a character as is done elsewhere. We know the men of this particular town are doing original work, which should be reported, especially for the benefit of other doctors within the state. We know that a number of our doctors are so located as to be thrown largely upon their own responsibility and that they originate many things which would be of gen-

eral interest, and which should be given to the medical world.

We do not feel that we are going to work a hardship upon a single Nevada doctor in asking for two contributions per month. Based upon such a requirement, and each of you contributing but one article, it would take just six years to exhaust our prabable supply, or the list of 144 of you. We feel sure that each of you can afford us an hour or two of your time out of six years.

If you doctors of Nevada were of the mediocre sort, which you are not, by any manner of means, we might not be so anxious to have you contribute to Nevada Medicine. You may not realize that such is the case, but the Nevada profession, as a whole, is considered far above the general average, and we, for the life of us, can see no reason why you should 'hide your light under a bushel.'

For many years it has been the habit of the people of Nevada to take their seriously sick to the coast, or elsewhere, and that habit still clings to many of our residents. And the doctors of Nevada are very largely to blame for this condition of affairs, especially those who are doing that which is not readily accomplished by the country pratitioners, and which naturally gravitates to the larger centers. If such men had written more they would have increased their reputations and it is very probable that our metropolis, Reno, would be a greater medical center than is now the case. The doctors in the coast cities realize this to be a fact and they are making every effort to hold this sort of practice. We know this to be a fact, as is demonstrated by the fact that some of them have offered to contribute to Nevada Medicine in that their names may be kept before the profession of the state, and by so doing have cases referred to them. If the men doing like work, right here in Nevada, were to follow such an exam-

ple it would be but a short time until not a single case would be sent out of the state for attention of a character which the country practitioner could not give.

As we have said in previous remarks, there are some of us who for various reasons, are not able to attend the annual meetings of State Association, and so are not thrown in personal contact with those men who are doing special work. In consequence of this we do not get acquainted with such men in any manner, whatsoever. We do not meet them personally, and we never see anything from them through the medium of the journals.

We, personally, know this to be an absolute fact. Something over a year ago we were desirous of referring a patient to a surgeon in Reno. At that time it had not been our pleasure to become acquainted, in any way, with the Reno profession, and we took the advice of a layman as to whom we should call. We were more than pleased to find the man called one able to cope with the case successfully. Had this man given anything to the journals, and which could have been done particularly well by him because of his extensive practice and experience, we would have known of his ability and not have been obliged to call upon a layman for advice. And this is but a single instance. There are other men within the state who are doing special work who should do everything arising within Nevada, and there is no reason why they should not, were they to make themselves, and their work, known.

We know of numerous cases of interest which have been treated in Nevada, ones which should have been reported, as they carried many things out of the ordinary—things of interest even to the country practitioner in his daily practice. By not reporting such cases those in charge might said to have

been derelict in their duty toward the balance of their brothers within the state. Not only does the specialist bring himself before the balance of the profession, through writing, but in addition he offers an educational factor which is of value, even to the lowliest of us. Consequently we believe that it is the duty of any, or all, of us to give the rest the benefit of our findings.

Nevada Medicine offers an avenue through which the Nevada profession may give voice to their ideas, their findings and descriptions of things out of the ordinary, coming under their observation. There is every reason why the Nevada profession should accept our invitation and fill the columns of Nevada Medicine with Nevada matter, to the exclusion of all else, and not a single one why they should refrain from such acceptance.

Some of you may think, as has been hinted, that Nevada Medicine is to be but a "flash in the pan," here today and gone tomorrow. Such is not the fact. We have come to stay. We have come to do all in our power for the profession of Nevada, as well as the people of the state. If we cannot get contributions from you here in Nevada we shall go elsewhere for matter with which to fill our reading columns—matter which will be of a high order—matter which will be of value to every one of our readers. We don't want to do anything of the sort, but if you force us, through lack of contributions on your part, we cannot do otherwise. In the language of John Henry, "It is up to you."

We believe, as you see that we have come to stay, there will be a change of heart on your part and that, in the very near future, we will have more more than enough to satisfy our requirements. We know that the majority of you have not been in the habit of writing, but it is a good one to form, and you will wonder a little later why you had not annexed such a thing long

since. We ask you to "Get Busy" and "Do It Now," sending us something, even the report of single case, for an early issue of Nevada Medicine.

SOME POINTS TO BE CONSIDERED IN THE TREATMENT OF TYPHOID FEVER WITH EMPHASIS ON A MORE LIBERAL DIET AND ANTITYPHOID VACCINATION.

SAMUEL E. EARP, M.S., M.D.,

Indianapolis, Ind.

Clinical Professor of Medicine, Indiana University School of Medicine, and Consultant at St. Vincent's, Protestant Deaconess, and City Hospitals, and Senior Clinician at the latter.

It is with more than passing pleasure that we present the following paper. Dr. Earp, the author, is recognized as one of the leading clinicians and therapeutists, not only of his home city, but of the country at large, and we feel that both ourselves and readers may feel lucky that such a man has given us such a timely contribution. The Doctor has promised other contributions from time to time, and we believe that our readers will look forward, with pleasure, to their appearance.—Editor.

Preventive medicine is in the van and consequently attention should be called to antityphoid vaccination. It has a decided value. Those who read the accounts in the medical journals of the work in the United States Army under the direction of Major F. F. Russell know of the favorable results. What has been done at our local hospitals together with the reports of the medical officers at Fort Benjamin Harrison, in Indianapolis, all indicate the same trend. It appears to be harmless and thus far all seems to be in favor of the procedure and nothing against it.

It seems fair to presume that the entire Indiana National Guard will receive the antityphoid vaccination if the War Department has its way. Representing the Chief Staff of the Army, Col. H. C. Hale is credited in a dispatch, to the Indianapolis Star, a few days ago as saying, "In view of the wonderful results achieved from the use of the typhoid vaccination in the

army, navy and civilian institutions it is believed the time has come to urge and encourage its extensive use in all militia organizations.

"The records for the calendar year just passed show that there were only eighteen cases of typhoid fever in the United States army, as against forty-four cases the previous year. Of these eighteen cases six occurred among the immunized, five were cases where infection was contracted prior to enlistment and the remaining seven had not been immunized. There were three deaths among the cases in the United States army, all of them not immunized.

"It may be said with a fair degree of assurance that the entire army has been immunized by the use of the typhoid prophylactic and in no case has there been a bad result following its use. In some cases a slight degree of illness, resulting in unpleasant sensations and slight fever were noted, but these were of short duration, rarely lasting over twenty-four hours.

Col. Hale said that the great protection given by prophylactic immunization is shown in many instances which he cites in connection with the military measures in Texas and along the Mexican frontier. "As a result of this inoculation," continued Col. Hale, "only two cases of typhoid occurred among the 12,000 troops in Texas in 1911, and one of these was in an unoculated civilian teamster."

"It has been fairly demonstrated to

the medical profession and the general public that the immunization of troops against typhoid fever by the typhoid prophylactic is a thoroughly practical measure for the prevention of the disease and that its protective value is only second in importance to vaccination against smallpox."

Col. Hale announces that the National Guards of Ohio, Louisiana, Maryland, Massachusetts, Minnesota, Mississippi, Missouri, New York, North Carolina, South Carolina, Virginia and Wisconsin already have used the vaccine with good results. If the militia should be called into the field of service in Mexico the first step will be compulsory vaccination against typhoid.

Sero-therapy used in twenty-nine cases recently by Fortier and Lebel reported in the *Journal de Med. et de Chir.*, shows one death and a serum which has bactericidal as well as anti-toxic qualities is suggested. The method is not perfected, and perhaps a better knowledge of the disease is needed.

In the general management a good nurse is essential but much harm is done by "overdoing." A well ventilated room furnished with necessities, only, is important and by all means too much stress cannot be placed on isolation. Neglect in this respect is a common fault in some hospitals. A patient should not be annoyed by others and there are times when the nurse unintentionally disturbs the quietude of the patient. To add to the cheerfulness of the patient does not imply that he must be annoyed by conversation. Tact in such cases is a jewel. Much could be said upon this topic, suffice to say that attention to this point is a very great adjuvant to recovery.

Cleanliness of the body should be observed by sponging the body at least once each day with warm water to which alcohol has been added and the strict observance of hygiene calls for careful attention to the toilet of the mouth.

I am in favor of a liberal diet and

this subject is of sufficient importance to give more than a passing thought. Loss of weight is usually marked until the third period of the disease, especially when a starvation diet is maintained and when more food is allowed the weight is slowly regained. Whether the loss is due to a toxic destruction of the protein or to the fever, these factors do not mitigate against a freer use of nourishment but rather demand it. We must consider whether or not imperfect metabolism prevents the utilization of food; whether assimilation is so retarded by pathologic conditions that food accomplishes but little or simply becomes an irritant; whether hemorrhage or perforation is more likely to occur. It seems unreasonable that these furnish a hypothesis warranting any one to starve a patient as is frequently done by the light diet, until anemia and exhaustion are pronounced. True the disease is in part responsible but the loss of nourishment adds to the destructive process without an effort to retard or overcome.

An editorial in the *Therapeutic Gazette*, perhaps in January, speaks of a late contribution to the *Archives of Internal Medicine* by Du Bois. He quotes a number of investigations in support of the view that typhoid patients have heretofore been unnecessarily limited as to their food and then proceeds to detail the so-called "calorie diet" which was administered in the cases which he studied. These patients received a quart of milk, nearly a pint of 20-per-cent-cream, three to six ounces of lactose, two or three eggs, a couple slices of toast and some butter, and thereby obtained between two and three thousand calories or heat units, double the amount which they received when upon a milk diet. And there seems no objections to boiled rice, oatmeal, mashed potato, custard or ice cream. The writer who quoted the above endorses the method of Du Bois and with a very free diet has had excellent results.

In my own experience I have found less emaciation, less exhaustion, a sustenance of vital forces, less tendency to complications, a preservation of all forces of the body and less likelihood of untoward results and a shorter course.

I desire to again call attention to the former source quoted. Du Bois's investigations show that when carbohydrates are given up to 10 ounces a day, careful examination of the stools reveals only traces of them at the very most, and often a total absence, showing that the material has been digested and assimilated. So, too, an examination of the nitrogen of the feces never exceeded amounts which were within normal limits. The only point which is noteworthy seems to be that during the early part of the disease the patient failed to assimilate fat as well as during the third and in the fourth week. He also found that the indican in the urine, which is indicative to some extent of the putrefaction of nitrogenous substances, while high in the early part of the disease decreases steadily as the patient's condition improves, and that it does not materially differ from the quantity found in the stools of normal individuals at any time. Du Bois therefore believes that typhoid fever patients throughout the disease can absorb carbohydrates and protein as well as normal ones, and that they can also absorb a large amount of fat, although the percentage is a little lower than normal. The loss of energy and the deficient nutrition must be overcome and a more liberal diet within reasonable bounds is the remedy.

The New York Medical Journal recently spoke of the good work of Coleman and Shaffer which is almost identical with what I have quoted from another source. So much reliance does Coleman place on liberal feeding that he believes that enough food will remove the necessity for hydrotherapy by counteracting toxemia. Enough for a

short contribution has been said concerning diet.

The bowels should not be inactive, this can be prevented by an enema of normal salt solution each day and if it needs be castor oil with ten minims of turpentine at times.

I am an advocate of the graduated bath and a word of caution just here; if quietude in bed is essential then we must not forget that it applies to placing the patient in the tub. The attendants should convey the patient to the tub in a sheet and do so carefully having placed an air cushion in the tub to support the buttocks and another for the head. The patient must be comfortable. Whether an alcohol rub should be given before and after the bath is a question of judgment. However this form of the bath is unnecessary unless the temperature is above 102°F. Sprinkling, the cradle bath or the cold pack I do not care for but I do place much reliance on the cold sponge. First let the water be 99°. then add ice to the basin until it is 70°F. This might be termed the graduated sponge bath. It may be applied each three hours of fifteen minutes duration or several times a day may suffice and the ice-cap must not be forgotten and it alone will sometimes answer the purpose.

This contribution cannot contain a review of the drugs that have been used, some of which will give good results. I will say that sparteine sulphate and strychnia sulphate are favorites with me when I believe they are indicated. Sometimes they make possible conditions whereby untoward consequences can be averted.

Complications would make a long essay and this is also true of typhoid fever independent of them and yet to follow the suggestions I have made, complications are less likely to arise and at any rate I have endeavored in a brief outline, and condensed to a great extent, to confine myself to some of the things to be considered in the treatment of typhoid fever.

MISCELLANY—Continued

DRESSING IN SUPPURATING WOUNDS.

The healing of suppurating wounds may be expedited in a marked degree by the use of echol (Battle). In addition to a germicidal influence it adds to cellular resistance, as a result of which the luxuriant germ growth becomes inhibited, until finally the purulent process becomes reduced to the point where the resistance of the involved tissues turns the tide toward healthy granulation. Where such wounds are of more than ordinary size or severity, the internal administration of echol has proven a most useful adjunct to the local treatment.

The Lilly Scientific Bulletin.—For the information of our readers we desire to say that Eli Lilly and Company, Indianapolis, Ind., publish regularly The Lilly Scientific Bulletin, and on request it will be cheerfully sent to libraries and individuals interested in the sciences related to medicine and pharmacy. Nearly every physician is conversant with the thoroughness in which this firm conducts their business, but it may surprise some to know the comprehensive and perfected manner of their Scientific Department, we therefore give the personnel of the same:

Frank R. Eldred, Director.

Analytical Department—W. C. Bartholomew, Chief Analytical Chemist; J. W. Meader, Assistant Chief Analytical Chemist; R. N. Reed, J. W. Rice, Walter Hoover, A. E. Stickels, Ruth Bell, Clara Schaefer, Analytical Chemists; Carl Weaver, Assistant.

Department of Experimental Medicine—Charles C. Haskell, Director; C. R. Eckler, W. F. Baker, Pharmacologists; Chester Hargreaves, Assistant.

Department of Chemical Research—C. M. Pence, H. W. Rhodehamel, A. B. Davis, R. W. Showalter, Research Chemists; Paul Seytter, Assistant.

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Biological Department—Severance Burrage, Director; Burt R. Rickards, Assistant Director; Lex. B. Clore, Bacteriologist.

Surgical Shock: Its Prevention.—"In major operations, absolutely essential for

the eradication of malignant diseases, the removal of neoplasms and similar shock producing procedures, occurring in individuals afflicted with advanced organic, cardiac and arterial disease, by subjecting such to a course of Digalen treatment for from four to six weeks, circulatory equilibrium is established upon a sufficiently firm basis to enable these cases to withstand serious operations successfully.

In the impending collapse, during major operations the injection of from 2 to 4 cc of Digalen after a few minutes cessation of operative procedure, has rendered it practical to successfully terminate an otherwise fatal operation. So marked have been the results following this especial use of Digalen that I have almost become routine in its administration in anticipating and preventing, to a large degree, surgical shock in major operations.—Henry Beates, Jr., Philadelphia.

The New Vacule Package.—A novel package is now being extensively advertised by the H. K. Mulford Company of Philadelphia as the "New Vacule Package." These "vacules" are vacuum containers especially employed for the prevention of deterioration in the activity of potent drugs, especially Digitalis, Ergot and Strophanthus. Careful investigations show that many preparations undergo changes, even when kept in tightly corked bottles, which result in a great loss of activity and thus render them unreliable as therapeutic agents. Only recently was it discovered, as the result of a series of experiments conducted in the Mulford Research Laboratories, that the changes to which the deterioration in these preparations is due, are caused primarily by the action of oxygen of the air which is held in solution in the liquid.



Further investigations show that with complete exhaustion and exclusion of air from the container and its contents, practical permanency may be secured, and in accordance with this, the H. K. Mulford Company have placed upon the market standardized preparations of Ergot, Digitalis and Strophanthus in "Vacules" (Vacuum Ampuls), which differ from ordinary "sealed ampuls" in that all the air is removed from the liquid contained in the Vacules, which ensures permanency to the product.

Coughs, Colds and Catarrhs. In all but the most equable of climates, a very large proportion of the population suffers more or

less from coughs and colds during the winter months. Many individuals who, at other times, are apparently in excellent health, contract a cold almost as soon as the cold weather commences, and are scarcely convalescent before another attack occurs, until a sub-acute or more or less chronic nasopharyngeal catarrh is established which is not thrown off until the spring opens. The frequency of such respiratory affections during the winter months is no doubt mainly due to surface chilling from frequent exposure to changes of temperature and the general lack of adequate ventilation of artificially heated houses, stores, offices and schools. Insufficient oxygenation, the longer "housing up" of the individual and the indisposition to open air exercise in cold weather undoubtedly serve to reduce the general vitality and the respiratory mucous membrane becomes less resistant and more readily subject to infective and catarrhal influences. When (as is usually the case) the patient cannot correct the unhygienic conditions referred to, it is the part of wisdom to tone up the general vitality of the patient and thus render his respiratory tract more resistant to morbid influences. This can best be accomplished by prescribing Pepto-Mangan (Gude) as soon as the more acute symptoms have disappeared. A thorough course of treatment with this efficient blood builder and general tonic reconstructive very frequently places the patient in a position to successfully ward off further catarrhal attacks.

THE STORM BINDER AND ABDOMINAL SUPPORTER.

The problem of securing a proper and efficient abdominal support during pregnancy and after confinement as well as after laparotomies is an important one, and has in recent years been extended considerably, since the importance of relieving all varieties of enteroptosis by mechanical sup-

port has been realized. The treatment of enteroptosis, of floating kidney and even of cholelithiasis (according to Achilles Rose), by a well fitting abdominal support has been successful in a large number of cases. It is, however, indispensable that the support should not only be properly adjusted and should hold the prolapsed viscera in place, but it must also be free from discomfort, it must be washable, durable in quality and moderate in price.

All these requirements are unusually well met in the Binder and Abdominal Supporter made in many varieties and for all conceivable purposes by Katherine L. Storm, M. D., 1541 Diamond St., Philadelphia, Pa., who has made a remarkably successful study of the problem and has solved it to the complete satisfaction, not only of the physicians and surgeons ordering the "Storm Binders," but also of their patients, which after all is the important point. Better write to Dr. Storm and find out about her binders for that neurasthenic patient of yours whose abdominal walls are relaxed and permit the viscera to drag down.—The American Journal of Clinical Medicine.

Sleeplessness in Acute Diseases.—Its freedom from danger and depressing after effects, eminently qualifies pasadyne (Daniel's concentrated tincture of *passiflora incarnata*) for use as a sleep producing agent in acute processes made less tolerable by sleeplessness.

The advantage of a safe hypnotic in the presence of a circulatory apparatus weakened by toxic products evolved in acute diseases, will be appreciated by all medical men, and it is by reason of this element of safety, as well as freedom from depression, that pasadyne (Daniel's) has come into such popular use.

For securing sleep this agent may be just as confidently relied upon as chloral or bromides. The desired therapeutic effect is obtainable in a short time and is lasting, affording a most restful sleep with a minimum of dosage. Pasadyne (Daniel's) will prove agreeably surprising to those who have not yet tested its merits.

Digitalis Efficiency

Digalen

**A good thing to remember
when treating pneumonia.
Sample on request.**

*The Hoffmann-LaRoche Chemical Works
440 Washington Street, New York*

Denver Medical Times

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MODERN MEDICINE AND SURGERY.*

D. W. REED, M.D.,
Greeley, Colo.

Originally medical practice was limited to the priesthood—it originated with the clergy and, considering its origin, we think it has done very well.

The powerful force of suggestion was at that early day brought into use for the benefit of the distressed, and today it is employed more than ever before. It was among the Greeks, however, and especially by Hippocrates and his associates, 2,300 years ago, that the foundations were laid from which, through a continuous line of existence and evolution, the development of civilized medicine can be traced to the present time.

The early medicine of the Greeks, as of other peoples, had mythologic as well as theologic features. Esculapius, the god of medicine, was probably a real physician who lived prior to 1000 B. C. The temples devoted to his cult were located in salubrious situations or at mineral springs, to which large numbers of invalids resorted and were ministered to by the physician priests. From the priesthood in connection with these resorts, there developed about this time associations or guilds of physicians who limited their practice to the medical side of their profession, to the exclusion of the priestly functions. Thus the priesthood was separated from medicine, leaving medicine and the medical profession free to develop along independent and scientific lines. This marks an important epoch in the evolution of medicine.

Hippocrates practiced from about 477 to 460 B. C., at the zenith of Greek

culture and civilization. He wrote several books which constitute a comprehensive and systematic presentation of the best medical and surgical doctrines and practices of the time. Especial attention was given to prognosis, dietetics and meteorological conditions as causes of disease. The next step in advance in medicine was made by Galen of Rome, about 200 A. D. He revived the system of Hippocrates, and so powerful was his influence that Hippocrates and Galen were the main authorities in medicine for nearly 1,500 years, through the stagnation of thought during the middle ages until the great intellectual awakening known as the Renaissance, marking the end of the middle ages and the beginning of the modern era.

The awakening in medicine was first manifested in the sixteenth century in the development of anatomical knowledge as we have it today, under Vesalius, Sylvius, Eustachius, Fallopius and their successors, many of whose names are immortalized in the anatomical names in use at the present time. In the sixteenth century also lived Ambroise Pare, the father of surgery, and important discoveries were made in obstetrics and gynecology. In the seventeenth century modern microscopy was developed and modern physiology was founded by the discoveries of William Harvey concerning the circulation of the blood. These discoveries in anatomy and physiology overthrew the theories of Hippocrates and Galen in internal medicine.

*Read before the Weld County Medical Society at the regular monthly meeting, Jan. 6, 1913.

There followed a period of three centuries of experimentation and theorizing before medicine really became a member of the family of modern sciences. Many ephemeral systems were successively developed to be abandoned each in turn, leaving little impress of abiding value or truth upon internal medicine. Some few factors stand out prominently. The distinction between living and non-living matter furnished ground for basing medical philosophies on spiritual and material principles respectively. The development of internal medicine was far behind that of other sciences, and the second quarter of the nineteenth century may be considered approximately the end of the medieval period in medicine, as but little advancement had been made since the time of Hippocrates, although much had been done in the differentiation of the various diseases, the discovery and introduction of remedies, while the development of scientific anatomy, physiology and chemistry had been salutary in their effect upon internal medicine. Modern medicine has been developed by inductive, objective and empirical methods of obtaining knowledge, while the old doctrines were the results of theory, speculations and superstitions.

The first branch of internal medicine to be developed on a sound scientific basis was pathological anatomy, i. e., the structure of tissues under the influence of disease. Morgagni was the pioneer in this, while Auenbrugger was the pioneer in modern physical examination by percussion, and Laennec by auscultation. Then followed the vast multitude of methods—physical, instrumental, chemical, microscopic and biologic, in daily use at the present time.

The discovery of anaesthesia with nitrous oxid in 1844, with ether in 1846 and with chloroform in 1847, gave a great impetus to surgery. The identification of the cellular structure of plants and animals and the development of

cellular pathology occurred from 1838 to 1858. The natural result of these researches was the discovery of the pathogenic role of bacteria and the development of bacterial science, which has cleared up the pathology of the large and important list of infectious diseases and vastly increased the efficiency of medical and surgical treatment. The men most prominent in laying the foundation of bacteriology were Louis Pasteur of France, Joseph Lister of England and Robert Koch of Germany. The principal application of bacteriologic science has been of incalculable benefit to mankind by the introduction of antisepsis by Lister during the sixties of the nineteenth century, of the specific serum and vaccine treatment of certain infectious diseases, of prophylactic measures and of specific methods of diagnosis.

We are still living in the Renaissance of medicine, and the movement is still in unabated activity. With medical research and progress continuing at the present rate, the outlook is rich with promise for its future development and added benefits for mankind. Two methods of thought have prevailed in its evolution—the subjective or speculative, and the objective or scientific method. The former prevailed with the ancients; the latter characterizes modern science.

Let us briefly consider some of the recent changes in the practice of medicine and surgery: Not many years ago it was thought that a drink of water to a fever patient was almost surely fatal. Now every up-to-date physician prescribes abundance of water internally, externally and eternally. Not more than 20 or 30 years ago fresh milk was the universal diet for typhoid fever patients. The science of bacteriology has changed all this. Now even the laity know that there is no better culture medium known in which to develop typhoid germs than sweet milk, and no better method of distributing them than from the dairyman's milk can which

was rinsed with typhoid-fever-polluted water. At the present time every physician knows, or ought to know, that bacteria do not thrive well in an acid culture medium, hence the alimentary canal of the typhoid fever patient is acidulated with acid fruit juices, and to his drinking water is added a few drops of dilute hydrochloric acid to make the alimentary canal as unfavorable a place as possible for the multiplication of the *bacillus typhosus*. In this way we may make the patient much more comfortable and sometimes shorten the duration of the disease.

Epidemic spinal meningitis was formerly very fatal, but with Flexner's serum promptly administered, the mortality has been very greatly reduced. Eighty per cent are now saved. Diphtheria antitoxin has also saved millions of lives.

A vaccine to immunize people against typhoid fever has been in use for several years in armies, and has recently been used apparently successfully in private practice. Many other infectious diseases are now treated in this way, since the science of bacteriology has been discovered.

We recognize a disease today called malaria, which means *bad air*; but everybody today knows that the disease is conveyed to man through the bite of a mosquito. The same is true of the much dreaded yellow fever.

How do we prevent these diseases? Destroy the breeding places of the mosquitoes. Drain all marshy places, stagnant pools of water and every place favorable to breeding of mosquitoes, and the diseases cease to annoy.

The hook worm disease—the bane of the tropics—is now very tractable, and the bubonic plague is preventable by destroying the rats, the natural host of the germ that causes the disease. The flea carries the disease from the rat to man. Have you any rats on your premises? Kill them.

In surgery the X-ray has been a great

aid. The position of fractured or dislocated bones can be seen and corrected, and if the bones do not remain in proper position after reduction of the fracture, the up-to-date surgeon applies a silver plate and screws or wire nails to hold them in place.

It has already been demonstrated that a man can live without a stomach and glands can be transplanted from one person to another and perform their natural function in their new location. Large surfaces have been covered by skin taken from the bodies of friends of the patient, and it has recently been discovered that skin may be removed from healthy persons killed by accident and may be preserved several weeks until an emergency arises in which skin grafts are required. Bones have been transferred from one person to another, or a piece of bone taken out of one leg and transplanted to the other leg of the same person to take the place of a diseased bone that had to be removed. A rib has contributed a bone to form the framework of a new nose, the old one having been removed by accident or disease. A lower jaw has been removed entire and a silver jaw has been inserted, with no disfigurement to the face and but slight inconvenience to the patient.

But lest we should feel unduly exalted by past successes, we are compelled to face today two of the greatest problems which the medical profession has ever attempted to solve: During the last fifty years there has been an alarming decrease in the birth rate in the United States. Formerly families of 12 to 14 were not rare, even 18 to 22 in a family caused no surprise, but at the present time a family of five to eight is unusual.

On the other hand, there is not a corresponding decrease in the death rate during the first year of life. A man 80 years old today has a better prospect of living to 85 years than the newborn babe has to live to its fifth

year. The problems are: How shall we increase the diminishing birth rate and diminish the present death rate?

Several causes contribute to the diminishing birth rate: More men than formerly shirk the financial responsibility of supporting families. This is due to the high cost of living and their rapidly increasing love of luxury. Fewer women marry for a support, as the trades and professions are open to them, making marriage optional. Also for economic reasons more of both sexes marry later in life, after their most prolific period is past.

Many married people remain childless from choice or limit the size of their families for economic reasons or the wish to avoid care and responsibility, while others are sterile as a result of venereal diseases.

Infant Mortality. During the five years preceding 1902, 165 babies out of every 1,000 born died the first year, and the mortality has been but little reduced since then, in spite of all modern methods of hygiene. Seventeen per cent of deaths are caused by congenital troubles, chief of which are the venereal diseases.

While it is not in the province of this paper to decide by whom the much-agitated question of sex hygiene shall be taught—whether by the parents, school teachers or by the medical profession—it is to be hoped that when it is properly settled and properly taught, the knowledge thus diffused may eliminate a very large portion of this factor in infant mortality. One-third of all infant deaths occur during the first month. This is largely because they are born with weak constitutions. Weak and diseased or infirm parents cannot beget strong, healthy offspring, hence the Episcopal clergy in Chicago and other places are right in demanding a clean bill of health before performing any marriage ceremony. The laws should require that all venereal diseases be reported to the health offi-

cer with other infectious diseases, and each case should be watched carefully until a thorough cure is effected.

Epileptics, insane, criminals, idiots or semi-idiots should not be permitted to be the fathers and mothers of the future generation. Indiana and Oregon have taken the initiative in making laws which safeguard the future generation by the sterilization of this class of undesirable citizens. We long for the time to come when the young women in our country will choose strong, vigorous and healthy young men to be the fathers of their children, instead of basing their choice upon sentimental or mercenary grounds.

Artificial food is by far the greatest factor in the causation of infant mortality. Nineteen out of every twenty deaths from this cause are preventable. Mothers' milk is the only safe and natural food for babies. The greatest danger lies in weaning young infants. Mothers should be taught to recognize the inherent right of the child to its natural food, and only as a last resort should a babe be compelled to accept a substitute. Germany fines all mothers who can nurse their babes but will not, and doubles the fine for those who advise weaning, except in extreme cases.

But when the extreme cases do occur, the most available substitute for mothers' milk is modified or unmodified cows' milk, the chief objection to which is the difficulty of getting clean milk, free from disease-producing germs. Persons who depend upon this source for their milk supply should make a visit to the dairy when least expected and see the milkers at work. Note whether the cows are supplied with clean bedding, clean food and pure water, or the reverse. Carefully inspect the top of the milk in the pails to see if there is not a dark cover of droppings from the sides and udders of the cows; also notice whether the milkers wet the teats by dipping their hands into the milk and then allowing the

filthy drippings to return to the pail. This is not a fancy picture of the imagination, but can be seen any day in many dairies that furnish artificial food for babies who have been weaned entirely too early. But some dairymen say they strain their milk and that takes out all the filth. That is a mistake. The filth that is in chunks may be strained out, but not that which is in solution. When the milk is drawn clean and pure, it should be cooled suddenly and kept at a temperature so low that it is unfavorable to germ growth.

If these points were carried out practically, many lives of the defenseless babies might be saved. However, the

outlook is hopeful. Mothers are becoming informed in regard to the needs of the infant, and not all baby deaths are charged to a "mysterious Providence." Mothers realize more and more that weaning the baby before he is a year old is a hazardous process, and that artificial feeding is a menace to the health of the little ones.

The people are demanding clean milk, and the dairyman who refuses or neglects to supply this demand will soon find himself without patrons. Let us continue to agitate the subject, and surely baby mortality will be greatly diminished in the near future.

INFECTION WITH THE FISH TAPEWORM.

J. W. AMESSE, M.D.

Denver, Colo.

It is a matter of common observation that much of our best clinical material emanates from the dispensary. Not only is the ratio of morbidity higher among the indigent, but the environment of the individual is such as to interpose no barrier to the development and progress of disease. One is apt to find, therefore, in this sphere of professional activity, cases which illustrate most clearly what may be termed the natural history of a given disorder, unmodified as it is through neglected treatment and a low degree of systemic resistance.

This is especially true of infectious processes in general and of the parasitic diseases in particular. Regardless of latitude, a routine examination of intestinal contents in cases presenting for treatment in the out-patient department reveals a striking incidence of helminthic infection. Among the native born, *Ascaris Lumbricoides*, the common round worm, *Oxyuris Vermicularis*, the pin worm, and *Hymenolepis*

Nana, the dwarf tapeworm, are the parasites usually encountered.

In the Southern States we would find, in addition, the various forms of *Ameba Coli*, the hook worm, and possibly *Strongyloides Intestinalis*. The whip worm, *Trichuris Trichiura*, is found everywhere.

Among cosmopolitan communities, such as those represented by the average American city, the study of parasitology is greatly enhanced in the examination of the large foreign element which crowds our clinics. Here we may find many of the rarer forms of cestodal infection, such as *Tenia Solium* and *Bothriocephalus Latus*. An instance of the latter invasion occurring in an alien applying for relief at one of our public dispensaries is reported herewith.

It is probable that tape worms were well known to the ancients. We may infer, too, that Moses, whose comprehensive grasp of the complex problems of hygiene appeals with increasing force

to present day sanitarians, forbade the use of pork among his people because of its liability to harbor parasites. Aristotle described the proglottides of tapeworm, and in 1683 Tyson demonstrated the head.

The fish tapeworm is relatively infrequent in America. In certain parts of the world, however, notably in Finland, Denmark, Sweden, Russia, Holland and Japan, it is the most common source of infection with cestodea, half of the population in certain districts of Japan and Finland being affected.

The tide of immigration from these countries may be expected to carry with it the menace of water pollution. As a matter of fact, Warthin has already called the attention of the Michigan State Board of Health to the infection of lakes and rivers in that State by Finnish miners. One child, five years of age, was found suffering from fish tapeworm at Portage Lake. Nickerson had previously reported a case in the person of a child of four at Ely, Minn. These are the only autochthonous cases thus far reported in the United States, the remaining forty odd invasions appearing in immigrants.

The fact that Nickerson has demonstrated the plerocercoids of *Bothriocephalus latus* in fish from the Great Lakes would seem to forecast a more general infection.

The habitat of the adult worm is the intestine of man, dogs, cats, and occasionally foxes. The escaping eggs remain undeveloped for a time, depending on physical conditions. Sooner or later on oncospore escapes through the opening in the lid and is ingested by certain fish, such as the pike, perch, barbot and salmon. In the muscles of these fish it develops still further, and on being eaten partly cooked, or in the form of smoked or salted fish, it rapidly reaches the adult stage. Eggs may appear in the stools within three weeks after infection. The parasite itself may attain a length of thirty-five

feet and consist of 3,000 to 5,000 segments, the latter characterized by the rosette spot in the center. This peculiar arrangement of the uterus serves to differentiate fish tapeworm readily from all other varieties.

Ordinarily the worm appears singly, but there may be several. R. L. Wilson reports a case in which thirteen heads were demonstrated, the combined length of the parasites being 319 feet!

So far as the pathogenesis is concerned, all observers note the association of this parasite with a grave anemia, resembling in many ways the pernicious form.

Some authorities report a mortality of sixteen per cent, but thus far no fatal instance has occurred in this country. It is altogether likely that the anemia is produced by the absorption of toxins elaborated by the parasite.

The prophylaxis hinges entirely on the adequate cooking of fish. Raw, smoked or salted fish, from lakes and streams open to sewage contamination from large cities or from towns inhabited by certain classes of immigrants, is unsafe.

In the treatment of the disease, male fern must be considered our most potent remedy, the anemia to be managed along lines suggested for the severe forms of this disorder.

Case Report.

A. O., Japanese, male; age, 45; married; residence in Colorado, twenty years; family history unimportant.

Patient was strong and well up to ten years ago, when he became thin, anemic and easily exhausted. Shortness of breath and abdominal distress were especially complained of. These symptoms have gradually increased in intensity, and coincident with them there has been noted the discharge of tapeworm segments. Various measures have been employed to expel the worm, without success. The patient presented a specimen of this parasite about three

feet in length, easily recognized as the *Bothriocephalus latus* by the rosette form of the uterus in the broad segments. Physical examination showed the man to be greatly emaciated, while the pallor was striking. In spite of the apparent anemia, the hemoglobin content was about normal and the red count 4,000,000. The leucocyte count showed an eosinophilia of eight per cent.

Oleoresin of aspidium was prescribed,

and the patient instructed to return to the clinic in a few days, bringing such portions of the worm as might be expelled. No more was heard of him, however, and it was subsequently learned that he lived in the southern part of Colorado.

As Mosler reports a case of fourteen years' duration, it seems entirely probable that this individual was infected during a visit to Japan, ten years previous to our examination.

THE INTERNAL SECRETIONS.

DR. T. H. GLENN,
Chicago, Ill.

Attempts to solve the mysteries of the internal secretions have led to a great array of literature, much of which is worse than useless. The writers, inexperienced in this particular field of investigation, have come to conclusions unwarranted by the facts, and have formulated theories, fantastical and beautiful as they may appear, which are entirely out of harmony with scientific research.

It is unfortunate that so many unskilled hands have trespassed upon this most important field of research, because it has had a tendency to lead younger men astray. Fascinating as the problems of internal secretions are, their study is fraught with difficulty. The end products of the metabolic process are known, but what takes place inside of the organism still remains a dark problem in the physiology of digestion. To get any information at all on this subject, we have been forced to resort to the study of pathological conditions and chemical analyses of the products found in an organism whose metabolism has been artificially stopped at a certain period. This introduces into the study many complications which are bound to lead to serious errors. It must be admitted, however,

that these methods, crude though they may seem, offer the most inviting field for the study of chemical processes taking place in the animal organism; for, after all, if we can stop the chemical processes at certain stages of the process, we can, by a series of analyses, at least point the way in which the change is taking place, and, in time, fill in the gaps and thus bridge over this great unknown field.

There are two mechanisms through which the body organs are co-ordinated; first, by the nervous system, and, second, by the chemical products of the cells. The latter substances are carried either by the blood or the lymph stream to different parts of the body. The amount of such substance contained in the circulatory system varies from time to time, and now and then it is very probable that the blood may be entirely free from some of these substances.

These chemical substances may be divided into two or three groups. First we have those substances, products of the body metabolism, which influence directly the action of the different organs. Of this type CO_2 , which exercises such a marked influence on the respiratory center, is a good example.

Then we have a large group of chemical substances which have the power to neutralize toxic agents, and lastly we have substances the chemistry of which is unknown, which have the power to activate or inhibit the chemical processes going on in the body.

To distinguish definitely between the functions performed by these different substances is by no means an easy one. There are, undoubtedly, poisonous products which may get into the blood stream and which may act as accelerator or depressor substances, just as an internal secretion may by too much or too little produce these conditions. The detoxicating substances neutralize the toxic substances and allow the body to perform its normal physiological function. In the splitting of the proteins in the body, we have NH_3 produced, which may, as a toxic substance, produce serious symptoms, but the liver cells take this up ordinarily before any harm is done and convert it into urea. It may be assumed, therefore, that many of the functions assigned to the internal secretions are the work of toxic and detoxicating bodies. It must be admitted, however, that there are substances produced by glandular organs which are essential to the vitality of the body. These substances are called internal secretions because they do not find their way to a free surface by way of a duct.

It is often taught that these internal secretions are products of certain glands, chiefly of the ductless variety; but, as a matter of fact, they are probably produced by all the living tissues. In fact, it is quite probable that the nervous system itself owes its power over the other tissues to the fact that it has the ability to produce these internal secretions.

Many investigators of the internal secretions have been content to test the extracts of an organ upon the body of a healthy animal. This obviously does not exclude the possibility that the act-

ive substance in the extract is the product of postmortem changes, and therefore has no significance normally. Secondly, the action of a substance upon a healthy animal is quite a different thing than the action produced in a pathological one. In order to establish the presence of an internal secretion, one must demonstrate that the venous blood or the lymph flowing from the organ exercises a specific influence upon the bodily function; also, that the extirpation of the organ produces disturbances which are not due to accidental lesions, and which eventually disappear on transplantation of the organ or upon the administration of the extract.

As early as 1849 Berthold, a professor in Goettingen, performed experiments in which he demonstrated that the transplantation of the testicle from its usual location to another part of the body of a rooster did not deprive the bird of any of its masculine qualities.

Claude Bernard, 1855, expressed the idea that not only were there external secretions from the glands, but that internal secretions are produced by all the organs which have much to do with the development of the body. He pointed out the fact that liver cells not only produced the bile, but also produced an internal secretion which has something to do with the glycolytic metabolism of the body.

Fourteen years later Brown Sequard held the view that all glands, no matter whether they possess ducts or not, produce useful substances which circulate in the blood. When these substances are absent, pathological conditions result. It was twenty years later, however, when the same author attempted to demonstrate his conclusions experimentally. Sequard, then 75 years old, injected subcutaneously extracts of testicle into his own body and declared that this extract caused a return of youthful vigor and a stimulation of the intellectual functions. While Sequard

did not find in the testicular extract the elixir of youth, his observations opened up a sourceful field of research, which has been a more or less productive one.

Schiff, Kocher and others established the fact that the thyroid, a ductless gland, and therefore incapable of affording an external secretion, plays an important part in the organism. These authors showed that the removal of the gland leads to a series of grave symptoms, such as myxedema and cretinism. Murray later demonstrated that the injection of an extract of the thyroid caused these symptoms to disappear. It was shown later that if an excess of thyroid extract be given, not only did the myxedema disappear, but marked symptoms of exophthalmic goitre developed. This same condition is brought about if the thyroid becomes too active. A removal of a portion of the gland in this case brings about a normal condition.

If the thyroid has anything to do with the nitrogen metabolism of the body, it would naturally be expected that younger animals would be the first to succumb to the operation for their removal, since they not only have to keep up the nitrogen equilibrium, but they must store up nitrogen to grow. As a matter of fact, younger animals do succumb to this operation much more quickly than older ones. Loss of thyroid tissue, either through operation or disease, leads to a decrease in the nitrogen metabolism. A deficient thyroid secretion in young animals prevents their developing normally, producing absolute deficiency of development in cretinism or relative deficiency in infantilism.

This would lead one to believe that the function of the thyroid gland is to produce a kinase, which, in some way, activates both proteolytic and oxidative enzymes. That this substance is itself not an enzyme, is evident by the fact that it is not destroyed by sub-

mitting it to chemicals which readily destroy ferments, nor is it destroyed by boiling. We must not lose sight of the possibility, however, that the activating substance is attached to an inactive substance, which may protect it both from a moderate degree of heat and chemicals.

While there are some reasons for thinking that the function of the thyroid is to remove toxic bodies, since its removal produces tetany resembling toxic conditions produced by gastrointestinal putrefaction, this condition can be accounted for by the disturbances in the nitrogen metabolism due to the removal of the secretion. Furthermore, no poisonous or toxic substances have so far been detected in thyroidectomized animals. On the other hand, Perrin and others have shown that thyroidectomized animals have a lower resistance to inorganic poisons than normal animals. Reid Hunt also made the interesting observation that when white mice are fed one-tenth m. g. of thyroid extract, they develop a ten times higher resistance to subcutaneous injections of acetoneitrils.

The active substance of the thyroid gland is closely associated with the colloid. Bauman isolated an iodine-containing substance from the colloid, which is readily soluble in dilute alkalis, almost insoluble in water, but which is precipitated by acids. This substance he called iodothyryn. The injection of this substance into an animal gives all the actions of the extract of the gland. Ostwald found two substances in the gland: thyreoglobulin and a nuclein. These were obtained by fractional precipitation with ammonium sulphate. The thyreoglobulin contains the activating substance.

It is interesting to know the function of the colloid, for chemical analysis shows that the iodothyryn increases directly as the colloid. The colloid is undoubtedly a carrier. It binds the active secretion, and liberates it from time

to time, as needed for the physiological action of the body. If the secretion is not liberated, although the amount of colloid be large, the function of the gland is not performed. The colloid fails to give up the kinase, and symptoms of deficiency result. If, on the other hand, the colloid fails to bind the secretion, when the gland is extremely active we get the results of too much secretion and exophthalmic goitre or symptoms which approximate those of this disease. The function of the thyroid is more or less complex, and there are reasons for believing that it does not function independently of other organs.

The parathyroids are closely associated with the thyroid, and may be responsible for some conditions for which the thyroid is held responsible. The removal of these glands leads to muscular twitching, tetany, exophthalmos, rapid breathing, and death within a few days. McCallum thinks that these organs have something to do with the distribution of calcium salts, as the symptoms caused by its removal disappear on the administration of calcium salts. The injection of the extract of the parathyroid does not lead to the alleviation of the symptoms produced by their extirpation, so that the true function of these glands is still in doubt. It has been demonstrated, however, that the transplantation of the glands seem to reduce the effect of their removal.

Another organ which seems to have something to do with body growth is the pituitary body. Marinesco reported that the removal of this gland in cats resulted in death in from one to eighteen days. Vassale and Succhi observed that the removal of the pituitary gland in forty animals resulted in death in from five to seventeen days. Partial removal of the gland caused less marked symptoms. Cushing first pointed out the fact that young animals survive a complete removal of the pituitary body longer than older ones. This author

was able to ward off death and the serious symptoms caused by the extirpation of the gland, by its transplantation into the brain substance or the red bone marrow of the large bones. The same results were obtained by the injection of the extract of the gland. Biedl has confirmed these experiments.

Marie has shown that there is some close relationship between the pituitary gland and acromegaly. It has been pointed out that a congenital hypertrophy of the pituitary body is frequently associated with a general overdevelopment of the body, gigantism; whereas hypertrophy occurring in adult life apparently gives rise to greatly over-developed extremities, acromegaly. Congenital hyposecretion may be accompanied by infantilism, while later in life it may be followed by a loss of the sexual function. The chemistry of the gland has not been thoroughly studied, although it has been found to have a high phosphorus and calcium content.

Some workers have expressed the idea that the pituitary body and the thyroid are closely related, since in some thyroidectomized animals an enlarged pituitary body has been found. This evidence seems to be negatived by the fact that the physiological effects produced by the injection of an extract of the pituitary body differ entirely from those produced by an injection of thyroid extract. While the injection of the thyroid produces no observable effect upon the contraction of the heart, the pituitary extract causes great augmentation of the heart beat and a rise in blood pressure. From the evidence at hand, it would seem that the pituitary gland furnishes to the blood an internal secretion which tends to increase the contraction of the heart and blood vessels, and which has some influence upon the nutrition of bone and nervous tissue.

Between the adrenals and the pituitary body, there is a peculiar parallelism. Both contain a glandular and a

nervous portion, and both are associated with the life and activity of the body. The extract of the pituitary body causes a rise in blood pressure, while the action of adreualin on the circulatory system is well known. Since both of these organs have a tendency to stimulate the upbuilding of the body tissues, while the thyroid seems to stimulate oxidation and dissociation of the tissues, there seems to be an antagonism between these organs and the thyroid which tends to keep the body in a state of health.

Chemical substances are produced by the ovaries and testes. The deficiency of development of these organs results in a lack of development of the secondary sexual features of the animal. The development of the mammary gland in pregnancy seems to be caused by the production of an internal secretion in the fetus, which stimulates the mammary gland and causes it to hypertrophy. The injection of fetal extract into a virgin animal produces the same effect.

Bayliss and Starling have shown that the introduction of HCl into the duodenum leads to an increase of pancreatic secretion. This takes place even when the pancreas and the duodenum are separated. It could not, therefore, be produced by the stimulation of any substance passing to the pancreas by way of the pancreatic duct. The addition of HCl to the blood did not have any effect on the pancreatic secretion, so Bayliss and Starling concluded that there is something in the intestine itself which, when it enters the blood stream, passes to the pancreas and stimulates it. By macerating the mucous lining of the duodenum with sand, adding 0.4 per cent of HCl, boiling and neutralizing the fluid, then extracting with alcohol, these investigators were able to obtain a substance which they called secretin. This substance, when injected into the blood stream, causes not only an increased secretion of the

pancreas, but also an increased flow of bile.

A careful study of all these internal secretions shows them to act somewhat like enzymes, but, unlike enzymes, they are not destroyed by heat. Whether these substances are bound to another substance, thus rendering them more or less thermo-stable, is a question. In the study of the enzyme, invertase, Professor Mathews and I pointed out that this enzyme is an inactive colloidal gum with an active protein substance, which seems to be the ferment. This union renders the substance inert, and the ferment is thus tied up in the cell. The union of the carrier and enzyme constitutes the invertase zymogen. By adding acid to the zymogen, the enzyme is liberated from the carrier and now may unite with another substrate. We suggested that all ferments are thus anchored and rendered inert in the cell. The substances, therefore, obtained by chemists so far are not the active substance, but its zymogen. Internal secretions seem to be like bodies. Secretin is liberated by HCl. The active kinase in the thyroid seems to be tied up to the colloid, awaiting some other chemical substance to break the bond and set it free.

The physiology of the internal secretions is complicated. These hormones are dependent one upon the other. The normal condition is brought about by a careful arrangement of the glands, so that a balance is kept up. If secretions are produced in excess, we have an increase of a normal process, which becomes pathological; a diminution throws the body tissues out of harmony and disease results. Hypertrophy of one organ may be brought about by a deficiency of another. The removal of the hypertrophic organ may cause worse symptoms than those already existing.

The relation between the female genitals and the thyroid gland is an intimate one. The removal of one of these

organs may produce a series of disturbances, due to the effect the removal may have upon the other. It is a well known fact that exophthalmic goitre is a disease of the sexual age, while myxedema is a disease of infancy, early childhood, or maturity. During menstruation the thyroid is often markedly enlarged, and with this enlargement symptoms resembling exophthalmic goitre may be noted. Pregnancy is often a potent factor in causing an enlargement of the gland, and Elliot states that frequent pregnancies may be the starting point of a genuine Graves' disease; or, on the other hand, the subsequent involution may lead to a well-defined type of myxedema.

It has been observed by Goodal and Conn of Montreal, and others, that frequent sexual intercourse long continued may produce widespread pathological conditions. In one or two cases the ovaries were large, uterus almost twice the normal size, and the thyroid was much enlarged. Tachycardia and tremors were marked. Sexual rest not only decreased the size of the sexual organs, but the thyroid became normal as well. Congestion of the ovaries seems to increase the size of the thyroid. This is not compensatory, but the two glands appear to be neutralizers.

The over-activity of the ovarian secretion, whether chemically normal or perverted, calls forth a greater secretion of the thyroid to neutralize the over-activity of the pelvic organs and the gland hypertrophies. That the thyroid may have a marked effect upon the ovary is well demonstrated by the

fact that the administration of thyroid extract in some cases of amenorrhea leads to the return of the menstrual flow, with the alleviation of all of its symptoms. In myxedema, of which hypothyroidism is the cause, sex depression may be so pronounced as to amount to complete impotence. Gaudy describes two cases which illustrate this fact. His two patients, aged 25 and 33 years respectively, after having attained normal adult sexual life, developed myxedema, which was followed by a complete reversion to sexual infantilism, marked by atrophy of the genitals.

Cessation of menstruation in the female and impotence in the male are initial symptoms of aeromegaly, and the same effects are noted when neoplasms exert pressure on the pituitary gland.

The physiological function of the internal secretion is not limited to one organ, but affects the whole body system. It is impossible to remove a single organ without in some way disturbing the functions of other organs. Whether the results of the removal will be noted and produce well recognized pathological conditions, depends upon the relation of the part moved to the whole; and as to whether its function may be taken up by some other part. Any removal of an internal secretion causes a break in the harmony of the body functions, which may lead to a long series of troubles. This disorganization of the bodily functions certainly has some effect on the development of future pathological lesions.

MEDICAL PROGRESS

Pain in the Back in Women. Helen Hughes-Hielscher (March St. Paul Medical Journal) says that an endometritis may always be suspected where there is backache with a free discharge of mucus. Other common causes of backache in women are ptosis of the pelvic

contents, diastasis of the abdominal muscles, anemia, nerve exhaustion, deficient elimination, inflammation of the biliary or the urinary tract, with or without stone, hemorrhoids, ulceration or fissure of the rectum, disease of the sigmoid and coccyctitis. "When the

uterus is retroverted, the ovaries are usually found lying beneath it in a cystic condition." The most frequent cause of backache, sacroiliac subluxation (not mentioned by the author quoted), is readily relieved by strapping.

The Ways in Which Our Bowels Are Made to Move. The March number of *The Prescriber* is devoted to constipation and its treatment. J. Gordon Sharp states that X-ray investigations have shown that in normal subjects food should reach the cecum in four and one-half hours, the hepatic flexure of the colon in six and one-half hours, the splenic flexure in nine hours, the iliac colon in 12 hours, the pelvic in 18 hours, and in 24 hours there should be a complete emptying of the bowels. In constipation there is more or less delay in this passage. Saline purgatives (and phenolphthalein) act by increasing intestinal secretion and do not interfere with digestion. Castor oil, aloes, senna, rhubarb and cascara are rendered soluble and active only when they come in contact with the bile or pancreatic juice, and thus to some extent they interfere with the digestive process. Agar-agar passes through the alimentary canal practically unchanged, but absorbs large quantities of water, producing copious watery feces. Senna is an ideal purgative, since its action is confined to the peristalsis of the colon, not influencing the movements of the stomach or the small intestine.

The Early Diagnosis of Dementia Praecox by the General Practitioner. This autotoxemic degenerative disease, it is said, causes 20 to 25 per cent of all admissions into asylums. It appears in three forms, the hebephrenic (essentially juvenile type; usually gradual enfeeblement of mind), the catatonic (adolescence or early adult life; tendency to stupor, catalepsy, periodic excitement, persistence in a single line of thought, stubbornness or hypersuggestibility), and the paranoid (usually af-

ter the twenty-fifth year; "attended by hallucinations and delusions, anti-social attitude and suspiciousness, and rapidly progressing mental degeneration"). For the timely recognition of the disease in its incipency, the editor of the *New York Medical Journal* offers the following description of the early phenomena: "Prominent among these is emotional deterioration, the patient feeling neither joy nor sadness, and losing interest in his relatives, friends, pleasures, and, as a corollary to this, in his occupation, which he increasingly neglects. The flow of thought is impaired; incoherence becomes more or less evident, while a persistent reiteration of certain phrases begins to attract the attention of relatives and friends. Delusions of a depressed, hypochondriacal, and even persecutory type may also appear early in the disease, and be interspersed perhaps with outbursts of senseless and sometimes destructive excitement, usually ascribed to 'bad temper' or 'changed disposition.' These alternating outbreaks of depression, listlessness, etc., and exaltation have been regarded as strong presumptive evidence of the presence of dementia praecox.

"Overfeeding, outdoor life, tonics and change of environment are the essential features of the line of treatment which has given the best results. The strengthened organism adequately converts its toxic wastes into eliminable products and thus rids itself of the main pathogenic factor of the disease."

Abderhalden's Serodiagnosis of Pregnancy and Its Practical Application. The first original article upon this subject in an American medical journal is that by Henry Schwarze, of the Washington University Medical School, in the March *Interstate Medical Journal*. The test depends upon the formation of a specific protein-reducing ferment in the blood of pregnant women and female animals, designed to protect the body against parenterally introduced

placental matter. The test becomes of diagnostic value within six weeks after conception and for two weeks after full term delivery. It depends on the digestion of albumin from fresh human placenta by the serum of the blood of the patient examined, taken early in the morning. Such hydrolytic digestion by the pregnancy ferment may be shown by the dialyzation method or by the use of the polariscope, pregnant serum causing, after incubation, a distinct increase in rotation. In actual private practice this test will probably be used only in medicolegal cases, and in those subjects where there is a question as between pregnancy and new growth.

While There Is Life There Is Hope. Abraham Jacobi (February Medical Review of Reviews) utters the following note of cheer: "Many a 'doomed' case of pulmonary edema, from heart disease, acute pneumonia or nephritis, gives the lie to a fatal prognosis, if you know how to utilize powerful and repeated subcutaneous doses of the double salt of caffein, or a few big doses (10 to 15 minims) of a good fluid extract of digitalis, or strophanthin intravenously, with or without good hypodermic doses of camphor in sweet almond oil, or big doses of musk or sufficient doses of a nitrite. Only those of us who do not know what medicines can do, deny their efficacy."

FOREIGN JOURNALS

(Translated by Joseph Cuneo, M.D.)

TROPICAL DISEASES IN YUCATAN (MEXICO).

By MERAD SEIDOLIN

In four years of practice in Merida (Yucatan) the author had the opportunity of studying numerous cases of different tropical diseases. His report is very interesting, because the medical geography of Mexico in Europe is very little known.

Paludism, that is thought to be very frequent in Yucatan, is really rather rare; but in its place are found other diseases, such as tuberculosis, ankylostomiasis, dysentery and abscesses of the liver. The anopheles does not exist in Merida, and the cases of true paludism come from the interior. The parasitic varieties noticed by the author are the semi-lunar bodies (*Hem. precox*), rather rarely the tertiary form (*Hem. vivax*), and, finally, the quarternary form (*Hem. malariae*), which is quite rare.

In the four years the author had the opportunity of studying a hundred cases of yellow fever. The examination of the blood of a great number of patients showed the presence of protozoa, which the author considers the causative agents of the disease. Furthermore, he found that in a certain

number of cases the diazo reaction was positive.

Dysentery is very common, not considering the abscesses of the liver, which are a very frequent complication of the same. Dysentery, next to tuberculosis, is the most prevalent malady of Yucatan.

Beriberi has been found among Chimenamen, and there are not many doctors who believe that it is not imported.

Helminthiasis is very widely distributed throughout the country. Ankylostoma duodenalis, with the grave anemia peculiar to the disease, is very frequent, and also *Trichocephalus dispar*. Leprosy is likewise often observed.

All the cosmopolitan maladies develop well in Yucatan. Tuberculosis is the disease that gives the highest percentage of mortality, causing one-third of all deaths. It is estimated that one out of seventeen inhabitants is tuberculous.

Among other diseases, the author has noticed, in order of frequency, typhoid fever, cerebro-spinal meningitis and cancer.—*La Prensa Medica*, Havana, March 15, 1913.

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EDWIN LEWIS, M.D., Sedgwick, Colo.
G. R. POGUE, M.D., Greeley, Colo.
P. J. McHUGH, M. D., Fort Collins, Colo.

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SCALP SWELLINGS.

These are either congenital or acquired. Of the former type, dermoids are perhaps most common. They are noticed usually from the second to the fourteenth year, about the margin of the orbit, embedded in a shallow trough of bone. They are more tense and as a rule more sessile than sebaceous cysts.

Other congenital swellings are meningocele, encephalocele, hydrancephalocele and branched neuroma (convolute). A meningocele appears as a translucent, fluctuating pseudo-cyst with a small base. It becomes tense on forcible expiration and may be reduced. An encephalocele is a small, opaque, non-fluctuating, pulsating protrusion with a broad base. It becomes tense on forced expiration. Attempts at reduction causes pressure symptoms. Hy-

drencephalocele is larger than meningocele, and is a translucent, fluctuating, rarely pulsating, pedunculated, irreducible protrusion of membrane and the brain substance. By way of general treatment, Park advises to protect with a shield held in place by a suitable bandage or dressing. Compression, with or without puncture, has given the most generally satisfactory results. Ligation of the meninges has in some cases been successful. In sin-cipital encephalocele, plastic maneuvers, with or without extirpation, may be tried.

Among acquired swellings of the scalp contusions are the most common event. They show a central depression because of the elevated circular margins, which are not so hard as bone. They may simulate a depressed frac-

ture, but in the latter lesion the margins are sharp and irregular and are on a level with or below the general bony contour. Contusions are well treated with cooling lotions of dilute alcohol containing menthol. Cephal-hematoma, or caput succedaneum, is due to a collection of bloody serum under the scalp of the newborn, and is usually of no significance, except that the edge may become bony. Gentle pressure with antiseptic dressings is in order, and if the swelling persists more than a week it may be punctured and emptied with a trocar under antiseptic precautions. Cephalhematocele is a blood cyst communicating with the cranial cavity. It has a bluish color and shows great and rapid variations in volume, depending upon intracranial pressure. There are no brain symptoms on compressing this tumor.

Abscess of the scalp is limited in the subcutaneous tissue, widely diffused in the subaponeurotic connective tissue, spread out over one bone only when beneath the pericranium. The presence of pus is manifested by throbbing pain, redness, heat and swelling, fever, chills and sweats. Free incision and good drainage is imperative. Senn's solution (two per cent iodine, four per cent potassium iodide and 100 parts of water) is particularly serviceable here. The fungus cerebri which sometimes follows septic wounds of the scalp and skull, is a protruding mass, soft, lobulated, dirty white, pulsating, insensitive, often bleeding or discharging cerebrospinal fluid. It may become shut off from the cranial cavity. Roberts says there is no special line of treatment, merely cleanliness in removing the discharge and the use of antiseptic dressings. Moderate pressure may be tried, but is liable to do harm. Cutting off certain protuberances may be needed.

Sebaceous cysts (wens) are of very frequent occurrence upon the scalp, as well as the face (even the inside of the

lips). They are smooth, rounded, soft and doughy (hard if small). The overlying skin is pale and shiny (often destitute of hair), sometimes with a central black punctum. Park directs to split the cyst with a bistoury and remove each half from its bed. A lipoma somewhat resembles a wen. It is flat or rounded, lobular or smooth and immovable on the bone, but the skin moves over it. A Ranvier or inclusion cyst is a subcutaneous tumor under a minute scar or with a history of puncture.

Varix of a vein on the scalp does not refill on coughing, screaming or during deep and long-continued expiration, after it has been emptied and its base compressed. Thyroid pulsating tumor has a structure like the thyroid body, which is also enlarged. Cirroid aneurysm is a plexiform mass of pulsating arteries. Da Costa recommends excision after subcutaneous ligation of every accessible tributary of supply. Other tumors of the scalp are warts, nevi (flame-like, purple), telangiectases, fibroma molluscum, chondroma (hard, dense nodule at spheno-occipital articulation), sarcoma of dura or diploe, and carcinoma (usually ulcerating).

MEDICATION PER RECTUM.

The rectum, like the stomach, offers a poor absorbing surface for food. According to Starling, from the isolated large intestine of man only about 6 gm. of dextrose or 80 c. c. of water is absorbed in an hour, and proteins and fats are still slower of absorption. Starling holds, therefore, that feeding by nutrient enemata is merely a form of slow starvation, and that the only foods which are worth while giving by rectum are dextrose, water and salines.

Crystalline medicines, on the other hand, are readily taken up into the blood from the large intestine. Indeed, it is claimed that strychnin solutions and opiates are absorbed more promptly.

ly from the rectum than from the stomach. Rectal administration is particularly desirable in the case of those drugs which cause nausea and pain in the stomach when taken by the mouth. The amount of the solution injected need seldom exceed two ounces, and it is better not to give the medicine in this manner more than twice a day, lest the lower gut becomes intolerant. Crouzet's formula for salicylates is to dissolve four drams of sodium salicylate and one dram of powdered acacia in four ounces of milk (keeps sweet for some days). Of this mixture a tablespoonful (30 grains of salicylate) is an average dose, given with a glass or bulb syringe. When such medicaments tend to run quickly out of the fundamen-
t, they may be administered through a colon tube, or the buttocks can be compressed for fifteen to thirty minutes by hand or with zinc oxid plaster strips.

The stimulating and eliminatory value of the hot (103 degrees) colonic "normal" saline solution in cases of shock, collapse and sepsis is recognized by every surgeon, and the "drop method" of enteroclysis is the favorite procedure. Physicians are perhaps not so cognizant of the distinct efficacy of copious hot rectal irrigations in pneumonia, typhoid and other low febrile states with stupor, delirium and flatu-

lent distention of the bowels. For this purpose the Kemp recurrent double irrigating tube is especially convenient. The outflowing water carries with it by suction the gas from higher up.

A common clyster which seldom fails to empty the lower bowel is one composed of one ounce of epsom salts, two ounces of glycerin and four ounces of hot water. If there is much gas, a tablespoonful or two of turpentine may be added. For the constipation of infants (due usually to a relatively long sigmoid), the most certain and least harmful remedy, as a rule, is the daily injection, if needed, of from a teaspoonful to a tablespoonful of glycerin, diluted once or twice with water.

About twenty years ago Cantani sang the praises of massive irrigations of the bowel with a one per cent aqueous solution of tannic acid, for Asiatic cholera. While the curative power of this measure in true cholera may be open to question, there can be no doubt of its value in catarrhal colitis and simple dysentery. An equal amount of boric acid adds antiseptic potency to the method. For the summer diarrhea of infants and young children, restricted diet (leaving off milk) and enemata of one-half to two pints twice or thrice a day of warm physiologic salt solution, usually yields most satisfactory results.

PERSONALS

By the Editor and Associate Editors.

Dr. Horace Heath is rusticating in the balmy breezes of California.

Dr. J. J. Pattee of Pueblo has purchased the Sunshine ranch near Lakeside.

Dr. Fred Heller of Chicago was called to Pueblo recently by the illness of his mother.

Dr. Wm. H. Crisp has been chosen vice-president of the Denver Philosophical Society.

Dr. and Mrs. A. Coleman have returned to their home in Rocky Ford, after sojourning several months in California.

Mr. Carl Brucker of Fritzsche Bros., New York, died at his home in Passaic, N. J., on March 23rd. He was 55 years old.

The owners of the Metropolitan Building anticipate adding three more stories to the structure during the coming summer.

Dr. G. N. Towers of Ridgway has been chosen president of the Ouray County Medical Society; and Dr. B. B. Slick of Ouray, secretary.

We are grieved to learn of the sudden recent death, from heart trouble, of Ona B. Fitch, the beloved wife of Dr. Edwin L. Fitch of Denver.

Dr. and Mrs. Edward C. Hill made a trip to San Diego and the region thereabout, the latter part of April, returning to Denver on the fifth of May.

Dr. Bon O. Adams has returned to his

work in Pueblo after a couple of months well spent in visiting the surgeons of the South and the East.

Dr. A. E. Disbrow was seriously injured on Sunday, April 13, by running his auto into a rope stretched across the street to protect the crowd at the free musical show.

We are indebted to Dr. Thomas H. Hawkins for several interesting brochures printed in French under the auspices of the local medical society of Tunis, Africa.

The following dentists have been appointed as members of the state board of dental examiners: Drs. J. L. Howell, W. W. Laughlin, W. W. Flora, O. H. Hile and A. C. Hamm.

Drs. Varley, Forrester, Thompson, Lassen, McKenzie and Whitson had their office furniture and equipments destroyed by fire in the burning of the Swift Block, Pueblo, April 11.

Dr. J. R. Arneill, at the April meeting of the Denver Medical Club, reported good results in a case of myelogenous leukemia from the use of benzol, 7 to 15 minims in olive oil after meals.

Dr. Robert Levy exhibited an interesting case in a boy of 14 years with congenital absence of both external ears and fair hearing power, at the second April meeting of the Denver county society.

Governor Ammons has appointed Dr. Frank E. Rogers of Denver, Dr. Charles B. Dyde of Greeley, and Dr. Luke McLean (re-appointed) of Pueblo as members of the state board of medical examiners.

Drs. B. H. Matthews and T. R. Love gave a fine balonticon exhibition of slides of autochrome photographs of pathologic specimens at the second April meeting of the Medical Society of the City and County of Denver.

Dr. Prince A. Morrow, former editor of the *Journal of Cutaneous and Genitourinary Diseases* and president of the American Society for Sanitary and Moral Prophylaxis, died on March 17th at his home in New York, at the age of 66 years.

Dr. J. W. Ames (Denver Clinical and Pathological Society) has seen strikingly prompt cessation of hemorrhage in infants, after the subcutaneous injection of 5 or 10 c.c. of homologous blood freshly drawn from one of the parents.

Dr. O. S. Fowler went to Boston in the fourth week of April, to read a paper before the American Urological Association, upon "Urinary Stasis as a New Etiological Factor in Kidney Stones, with a New Method of Nephroproxy to Secure Ideal Natural Kidney Drainage."

Dr. E. E. Fauver of Loveland, died at St. Luke's Hospital, April 4, about a month following the third operation which he had undergone during the past year. Dr. Fauver was a good physician and a man of sterling merit. He leaves a widow and two sons to mourn an irreparable loss.

According to the Pueblo Chieftain, Dr. W. F. Singer, Great White Ant of the local body of Industrious Order of Ants, proposes to

"instill a greater interest in home affairs among the men" of that city and to "offer an inducement to all property owners and tenants to beautify the surroundings of their homes." This is Real Reform.

Some fifty members of the medical fraternity Omega Upsilon Phi from Denver and Boulder met around the banquet table at the Albany Hotel on the evening of March 6th. Dr. Hill served as toastmaster, and apt responses were made by Drs. Bane, Gilbert, Reed, Carmody, Grant, Patterson, Wallace and Whitmore, and by Mr. Knucky.

HEALTH CERTIFICATES AND MARRIAGE CERTIFICATES.

The following communication from Dr. B. S. Talmey, the well known author of "Neurasthenia Sexualis" and other works upon sexual subjects, states forcibly and with apt illustrations what every practical medical man knows to be true.

New York, March 25, 1913.

To the Editor of the Denver Medical Times.

Dear Doctor:—The article, "A New Idea Relative to Eugenics," by Dr. George L. Servoss in the March number of your journal, was of great interest to me, and I beg permission for a few remarks.

I agree with every thing the doctor says in this article; however, I cannot share his enthusiasm about the law requiring a certificate of health prior to allowing marriage. The doctor discusses the question from almost every point of view, but he fails to mention one thing, and the most important at that; i. e., there is no doctor in the world, no matter how learned, who can honestly and conscientiously give a certificate of health to any person who once suffered from a venereal disease, even if that person does not wish to conceal the previous infection, as most of the marriage candidates will do.

It goes without saying that no man or woman in full command of their senses will think of getting married while suffering from an acute infection of gonorrhoea or of syphilis, while yet in the secondary stage. Except the lowest stratum of society, and this class, if a certificate be denied, will simply live in illegal relations. No decent person will dream of contracting marriage while still suffering from a contagious disease of any kind. For all practical purposes, therefore, the certificate is thought to protect people from partners who had once contracted gonorrhoea or lues and are apparently cured.

Now, is there a physician who can tell such a candidate that he is absolutely cured? My professor of surgery in Munich, J. N. Nussbaum, used to tell us about a case of the celebrated physiologist Alexander Smith. A young man contracted lues and was apparently cured. For thirty years no sign of any disease was noticeable. So he decided to get married, but went first to ask Prof. Smith's advice. Prof. Smith told him that

thirty years with no sign of tertiary symptoms is a sure sign that the patient has been perfectly cured. The patient married, and when the first child was born it was syphilitic. Now, if Smith's certificate is no protection, whose will be? Few physicians are able to make the Wassermann, and even this reaction, if negative, is not always reliable. As to gonorrhoea, Prof. Neisser, the discoverer of the gonococcus, proposes the test for a marriage candidate to consist in injecting into the urethra a strong solution of nitrate of silver, thus causing a chemical urethritis, and then examine the discharge for gonococci. This procedure, he recommends to be repeated several times. Now, if Neisser needs for the diagnosis such severe tests, to which very few prospective husbands will willingly submit, what will the examination of the ordinary practitioner amount to? The fact is that there is no genito-urinary surgeon in existence who can positively tell a man that he has been cured from syphilis and even gonorrhoea without applying the severest tests, and if the candidate wishes to conceal a previous infection, no authority in the world could, in the majority of cases, positively contradict him.

The certificate can, therefore, have very little direct influence upon the venereal morbidity of marital couples. Still I wished to see such a law enacted in my own state. For the mere fact that a certificate will be necessary before contracting marriage, will cause people to think much more seriously about this question. The certificate will, therefore, have a beneficial effect in an indirect way.

B. S. TALMEY, M. D.,
12 W. 123rd St.

A PRIVILEGED MEDICAL CLASS.

Dr. G. Frank Lydston is neither dead nor sleeping, and he is not to be bribed with medicopolitical cake. In the February Southern Practitioner he shows how the Medical Reserve Corps has been reserved for the officers and camp followers of the Dearborn Avenue clique, and how in the observance of the law these medical politicians are a law unto themselves. We quote a few of his remarks:

"As to the personnel of the Illinois Reserve Corps Association, its roster contains the names of the following: the Editor-Manager-Boss of the A. M. A.; two Ex-Presidents of the A. M. A.; (one a former treasurer of the A. M. A.); the Assistant Secretary of the A. M. A.; the local Trustee of the A. M. A.; two Associate Editors of the A. M. A.; a former Trustee of the A. M. A.; two editors of subsidiary journals of the A. M. A.; the Chairman of the Committee of Public Health of the A. M. A.; the Chairman of the Committee on Education of the A. M. A.; (and

Ex-Chairmen galore); a member of the Council of Chemistry and Pharmacy, A. M. A.; three Secretaries of Sections, A. M. A. In brief, every Chicago member of the Oligarchic ring, and practically every one of its satellites, is in the Illinois R. C. A.!

"The army commissions held by the Medical Reserve Corps confer essentially the same rights and privileges as all other army commissions, although the latter are earned by examination and the former are unearned. That the Surgeon General, working in conjunction with the A. M. A., wishes these privileges to be unlimited and unfair to the profession at large will be seen later.

"Commissions in the Reserve Corps are supposed to be issued after a rigid examination. The majority of the Chicago contingent were not examined at all—not even physically. Any examination which may have been given in most cases was a farce. So far as I can ascertain, only two were examined as is pretended to be prescribed by law, and these gentlemen were not examined in Chicago. The "examining board" in most cases was a single army medical officer, and the examination essentially consisted of 'How do you do? What is your name? Good day.'

"One of the requirements for admission to the M. R. C. of the army pertains to the applicant's age, as follows:

"An applicant for appointment in the Medical Reserve Corps must be between twenty-two and forty-five years of age."

"N. B. Nearly 70 of the 112 members of the Chicago association are above the age limit. The true foundation of youth is the favor of the A. M. A. ring. The ghost of Ponce De Leon will please take notice.

"The Medical Reserve Corps, U. S. A., as at present constituted is a farce, and merely a kitchen for the medico-political trust monopoly—a kitchen in which to prepare its schemes of graft, power, revenge and politics.

"Graft is the acquirement of money, honors, property or any emolument without giving the quid pro quo. That the Medical Reserve Corps U. S. A. is used for political purposes, I will prove later. When the Medical Department of the Army is used by medical politicians for their own private ends, it is time for the great American citizen and the apathetic American doctor to 'sit up and take notice.' That this has been done, and that the Medical Department of the Army is at present under the control of the Octopus, I will shortly demonstrate beyond peradventure of doubt. I am curious to see whether the rank and file of the profession believe in the methods of the men who are trying to dominate and monopolize American Medicine. I am still more curious to learn whether or not the rank and file really like to have their rights as American citizens trampled on."

IN APPRECIATION.

Department of Sanitation, Ancon, Canal Zone, March 5, 1913.

Dear Doctor Stuver:

Yours of February 17th is acknowledged.

Please express to the Larimer County Medical Society my appreciation of the very complimentary resolution, a copy of which you send me. Such a resolution is not only gratifying to me personally, but is a tribute to our work down here.

I hope that we may meet at the Congress of American Physicians and Surgeons, next summer.

With kindest regards and best wishes, I am,

Yours very sincerely,

W. C. GORGAS,
Chief Sanitary Officer.

Doctor E. Stuver, Sec'y,
Larimer County Medical Society,
Fort Collins, Colorado.

BOOKS

Keen's Surgery. Volume VI: The Volume with the Newest Surgery. By 81 eminent surgeons. Edited by W. W. Keen, M. D., LL.D., Hon. F. R. C. S. (Eng. and Edin.), Emeritus Professor of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College, Philadelphia. Octavo of 1177 pages, with 519 illustrations, 22 in colors. Philadelphia and London: W. B. Saunders Company, 1913. Entire work, consisting of six volumes, per volume: Cloth, \$7.00 net; Half Morocco, \$8.00 net.

We have in this volume a new departure in medical literature, excellently executed. The five volumes originally constituting Keen's System of Surgery were published between 1906 and 1909. In order to bring this work thoroughly up to date, each author has been asked to furnish supplementary matter upon the subject or subjects assigned to him. Leonard Freeman, for example, has the chapter upon "Suppuration, Abscess, Sinu and Fistula, Ulcer and Gangrene." There are seventy chapters in all in this volume, handsomely and copiously illustrated. Among the newest and most interesting of these contributions are those by Crile upon Surgical Shock and Anoci-Association. Other new chapters or sections of special interest are: Surgery of the hypophysis, operative methods upon the thorax, the newer methods of anesthesia; treatment of cancer by fulguration, desiccation, chemotherapy, etc.; the applications of iodine, of salvarsan and of other old and new remedies. This volume is provided with a good index, as well as a general index to the six volumes. The work as a whole is indispensable to every practitioner who does any general surgery.

The International Medical Annual. A Year Book of Treatment and Practitioners' Index. 1913. Thirty-first year, New York: E. B. Treat & Co., 241-243 West 23d Street. Price, \$3.50.

This compact, comprehensive volume again meets the expectations of a host of subscribers, who will find in its pages a careful and impartial review, by well known authorities, of the world's past year's literature upon every medical and surgical sub-

ject. The contributors, 31 in all, include famous men from both continents. The parts of the text are, as heretofore: The Dictionary of Materia Medica and Therapeutics; The Dictionary of Treatment (much the largest portion); and Public Health. Among special articles of special timeliness and value may be mentioned the general review of salvarsan and those on radioactivity and electrotherapeutics, anesthetics, blood examination, brain surgery, cancer, surgery of the lung, X-rays in the diagnosis of oral sepsis, syphilis, surgery of the thyroid and tuberculosis. The text is handsomely illustrated with 42 full-page plates and numerous figures. E. C. H.

Men, Manners and Medicine. By Medicus Peregrinus. Octavo, uncut edges, in heavy paper cover; price, postpaid, one dollar. W. M. Leonard, Publisher, 101 Tremont Street, Boston, Mass.

The Essays and Sketches which make up this collection originally appeared from time to time in the columns of the "Boston Medical and Surgical Journal." They represent the observations of a doctor, from his professional point of view, on men and books and other phenomena, especially in relation to medicine. The reader may be not only entertained but instructed, as he realizes how abundantly the doctor's life affords special opportunities for contact with larger interests outside the day's work. Table of contents: Men, Manners and Medicine; Three American Men of Letters; Some Aspects of the Doctor; Some Modern Aspects of Heredity and Evolution; Homeric Physicians; the Sacrifice to Asklepios; Arthurian Physicians; Some Aspects of Modern Life; Four English Men of Letters; The Doctor's Year.

This publication is well worth perusal and is a worthy addition to the literature of the day. J. A. S.

A Compend of Histology. By Henry Erdmann Radasch, M. Sc., M. D., Assistant Professor of Histology in the Jefferson Medical College. Third Edition, revised and enlarged, with 111 illustrations. Phila-

delphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1912.

This is the third edition of a compend of histology by Dr. Radasch, and is certainly a most commendable little book. The text is very complete and the book is well illustrated. It has been brought down to date, and some sections not only rewritten but re-illustrated. Of especial interest is the newer work on development of the embryo. Many additions have been made to the book which, together with the numerous illustrations, make this little volume of great value.

T. R. L.

"My Little Sister." Dodd, Mead & Co., New York. Written by Elizabeth Robins.

"My Little Sister" has gripped its readers everywhere. Friends in the East write, "Have you read 'My Little Sister?'" and from the various states come expressions of appreciation of the strength and value of the book.

The author, Miss Elizabeth Robins, has many readable books to her credit, but in "My Little Sister" she has combined sympathy and force of portrayal with the spirit of the social worker and a knowledge of those conditions in large cities, to which the world is just awakening.

Readers of McClure's will remember the abbreviated form of the book, the story of two English girls, carefully and simply brought up, the studious, watchful older sister and the care-free, pleasure-loving younger one.

Into their quiet, secluded home comes a woman, bent on their destruction. Very cunningly the plot is laid and carried out.

To appreciate the agony of spirit of the older sister, the depths of man's depravity and woman's stony-heartedness, one must read the book.

We trust that the book may have a wide circulation, for it promises to do for the girl and the race all that settlements and social health organizations and kindred associations are striving to perform.

M. E. V. F.

International Clinics. A quarterly of illustrated clinical lectures and especially prepared original articles by leading members of the medical profession throughout the world. Edited by Henry W. Cattell, A. M., M. D., Philadelphia. Vol. I. Twenty-third series, 1913. Philadelphia and London: J. B. Lippincott Company.

The latest volume of *International Clinics* covers an unusually wide and interesting range of subjects. Probably the most striking contribution is that by Albert Abrams upon the symptomatic cure of aneurisms by spinal concussion. This paper is illustrated with convincing skiagrams. Bret Harte made one of his western characters once ask, "Has the Caucasian run out?" Lawrence Irwell inquires in this volume, "Is the Caucasian Race Deteriorating?" and con-

cludes that such is the fact. Exemplifying the present earnest interest in eugenics and euthenics is the extensive article by E. Bosworth McReady upon "Retarded Mental Development in Children." "Transplantation of Tissues," by L. L. McArthur, is a good resume of some very modern conservative methods. The editor, assisted by Dr. Lucius W. Johnson, contributes a 110-page digest of the progress of medicine during the year 1912.

E. C. H.

Progressive Medicine. A quarterly digest of advances, discoveries and improvements in the medical and surgical sciences. Edited by Hobart A. Hare, M. D., professor of therapeutics and materia medica in the Jefferson Medical College, Philadelphia; assisted by Leighton F. Appleman, M. D., March, 1913. Lea & Febiger, Philadelphia and New York. Six dollars per annum.

Among the subjects reviewed by Chas. H. Frazier under "Surgery of the Head, Neck and Thorax," the hypophysis, the cervical lymphatic nodes, and cancer of the mouth and breast are of great practical interest. John Ruhraeh contributes an excellent section upon infectious diseases, including acute rheumatism, croupous pneumonia and influenza. Floyd M. Crandall opens his section upon diseases of children with a stimulating discussion of infant mortality and child welfare. George B. Wood contributes a comprehensive chapter on rhinology and laryngology. Artur Duell's section upon otology is illustrated with a number of plates showing the operation of draining the cisterna magna.

E. C. H.

Golden Rules of Gynecology. By George B. Norberg, M. D., Professor of Diseases of Women and Clinical Gynecology, University Medical College, Kansas City, Mo., Gynecologist to Kansas City General Hospital, Fellow and Ex-President Kansas City Academy of Medicine. 250 pages. 8vo. Price, \$2.25. C. V. Mosby Co., St. Louis.

There is a need for just such a book as this one. It does not displace the textbook or the monograph on gynecology, but is rather a guide to what one should know and observe on this fascinating branch of medicine. In 250 pages one finds the really "Golden Rules," the observance and application of which will enable the practitioner of medicine to get results. Convenient in size and convincingly written, this volume can be perused over and over again with the feeling that each time it is read one becomes better able to cope with diseases of women.

Organic and Functional Nervous Diseases. A Text-Book of Neurology. By M. Allen Starr, M. D., Ph. D., LL.D., Sc. D., Professor of Neurology, College of Physicians and Surgeons, New York. Fourth edition, enlarged and thoroughly revised. Octavo, 970 pages, with 323 engravings and 30

plates in colors or monochrome. Cloth, \$6.00, net. Lea & Febiger, Philadelphia and New York, 1913.

Starr's standard work, now in its fourth edition, is a most satisfactory guide in neurologic cases for general practitioners, and is likewise well adapted to the needs of students by its definite orderly arrangement and the thorough consideration of the underlying pathology. In the present revision the text devoted to functional diseases is double in extent what it was in previous editions.

Such everyday conditions as headache, migraine, vertigo and disorders of sleep, are treated in a manner which physicians "need in their business." The sympathetic nervous system and its diseases form the fascinating subject of the fourth and final part of the text. Probably the most striking characteristic feature of this work is in the topographic charts, the photomicrographs of actual lesions and the numerous photographs of patients illustrating types of disease.

MISCELLANY

THE TONIC EFFECTS OF THE HYPOPHOSPHITES.

The choice of a tonic for the young is determined by special considerations, because their requirements differ in several important respects from those of adults. The interference with nutrition that arises from acute pyrexial infections is attended by particularly serious consequences in the young, because their growing tissues are less stable and their mineral constituents are less fixed, so that the disintegrating effects of exaggerated oxidation are much more rapidly produced.

The requirements of the youthful organism in the matter of inorganic salts are much greater than those of later life, because not only has the ordinary wear and tear to be provided for, but also the demands of growth. Acute disease, as we know, is characterized by more rapid oxidation and exaggerated metabolism, and the latter, in turn, is associated with wasteful leakage of the mineral constituents of the tissues.

Depleted of their mineral constituents, the tissues protect themselves as best they can by drawing on the organic reserves, especially the bones, so that pyrexia not only entails arrest of development, but also of positive denutrition.

Then, too, the blood pressure in the young is normally low compared with that of the adult, so that the depression resulting from the ravages of disease is particularly well marked.

Apart from acute disease, children suffer from a series of affections associated with chronic malnutrition. Dyspepsia, rickets, scurvy-rickets, etc., are all characterized by impoverishment of the tissues, so that although less rapidly induced, the constitutional changes are, roughly speaking, the same. The consequences, however, are more serious, because they are more protracted.

The lack of mineral salts in general and the compounds of phosphorus with the earthy bases in particular, leave the skeleton abnormally plastic, so that the traction of the muscles produces deformities of the thorax and limbs, which deformities are likely to become permanent unless speedily remedied.

The recognition of this condition affords the requisite data for the choice of the most suitable tonic. The weakly infant is the victim of more or less pronounced demineralization of the tissues, and the indication is that it should be provided with the material for remineralization in the form best adapted for immediate assimilation. At the same time, tone must be restored to the vascular system and to the muscles, in order to secure the performance of the vital functions.

Now the salts of which the youthful organism stands most in need are compounds of phosphorus, and, as its capacity for assimilation is limited in regard to any particular salt, the phosphorus must be combined with various bases. Of all the phosphorus compounds, the hypophosphites are recognized to be the most readily utilized by the tissues; hence a compound syrup of these salts will fulfil every indication.

The vasotonic element—strychnine—may advantageously be associated with these salts, as it is in Fellows' syrup of the hypophosphites.

Fellows' syrup is less a medicine than a food, just as salt is a food and not a mere condiment. Without salt the tissues are unable to assimilate and to retain the elements indispensable to their nutrition and growth. Under the influence of the hypophosphites they not only gain in weight, but also in density, owing to the fixation of inorganic salts, and so the balance of nutrition is restored.—Alfred S. Gubb, M. D., L. R. C. P. Lond., M. R. C. S. Eng., D. P. H., etc., Aix-le-Bains, Savoie, France, in *The Medical World*.

(Continued on page 567.)

Utah Medical Journal

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LOST—A FRIEND.

Although I had been informed that Dr. Frederic Clift, late editor of the Utah Medical Journal, was ill, the later information of his death came to me as a shock. While never having met Doctor Clift in person, I had reason to consider him one of my best friends. Some two years ago he requested me to contribute an occasional article for his journal, and a few months later asked me to become one of his associate editors, and still later made the arrangements whereby Nevada Medicine came into being.

During this time many letters passed between us, and those from him showed me that he was a man far above the average. They showed that he was not only a good physician, but one who had the interests of humanity at heart at all times. The fact that he took a very decided interest in eugenics and believed in purity of the human race, and that he did all in his power to bring about reforms, looking toward a better race in time to come, showed very conclusively that his friendship was a thing worth having.

Although Doctor Clift was not, as the world considers one, a rich man, nevertheless he never stood back and withheld his support of anything which promised greater things for humanity, even though such action on his part might have taken money which he could ill-afford to spend. It was largely through his efforts that Utah was given laws which looked to better things, and this work was done without a thought of recompense to him, either at the time of occurrence or in the future. He was a man absolutely without a selfish thought; one of God's noblemen.

Although Doctor Clift may have been found fault with by some within the profession, because of certain stands which he took, even those who may have personally disliked him could not but admit that he believed in and practiced the "square deal" in all of his relations with his brother doctors. He believed in our organizations, but further believed that they should be of the sort which would give the low, as well as the high, equal opportunities. He believed that those at the heads of our medical organizations should do the

work outlined for them, and through the columns of his journal made every effort to enforce action. It was through his efforts that the local societies and the Utah Medical Association ranked high in the medical organizations of the country.

It was largely through Doctor Clift's activities that the "Utah Plan" came into being, and still later that other right and just laws were enacted in that State. Other measures which he proposed were not, for the time being, acted upon, but had he lived they would, without a single doubt, have received the attention of the legislators of Utah. Although he has passed from our sight, the thing which he has begun will not die, but will be taken up by his associates, and his hovering spirit will rejoice in knowing that all that he has done on earth has not been lost.

Not only has Utah sustained a great loss through the death of Doctor Clift, but the medical world at large as well. We who have been closely associated with him will feel our loss more keenly than all others, as we have formed the habit of calling upon him for assistance in times of need, and it will be a difficult matter for us to give up this dependence. Doctor Clift, in addition to being a doctor of medicine, was one of law, and because of his great knowledge of things legal, we looked to him for opinions aside of those of a medical character. If we were desirous of offering a new measure to our legislators, it was Doctor Clift who drafted our ideas into form, such as would be acceptable. We all feel that we shall be obliged to seek into the furthestmost corners of the earth to find a man who will fill the place of Doctor Clift.

Personally, I feel that I have lost one of the best friends I have ever possessed. In addition to bestowing honors upon me, he came to my assistance, time and again, and in more ways than one. He showed me my errors and how they might be corrected. He com-

mended that which he thought was good, and censured, in a kindly manner, that which did not meet with his approval. I loved Doctor Clift because he was a fighter, always for the right and for the uplifting of not only his own profession, but the world at large. He was one of those men who, like Grant, would "fight it out on the same line, if it took all summer." Knowing that he was right, he never was known to retreat, and surrender was a word which undoubtedly could not be found in his vocabulary.

Despite the death of Doctor Clift, the Utah Medical Journal will live, prosper and grow, and will remain the same sort of journal as it was under his editorship; one of the highest possible type; one at the forefront in the fight for better things for humanity, as well as for the doctor.

We have, every one of us, lost one of our best friends, but let us hope that our loss is his gain. Let every one of us associated with this journal put forth our greatest efforts to keep alive that which Doctor Clift has begun and carried on so well. I, for one, am ready and willing to do everything in my power to keep alive the Utah section of this publication and to operate it upon the plans laid down by Doctor Clift. Let such effort on our part be our monument to his memory. I feel that such action on our part would have met with his heartiest approval, had he been allowed to live and view our actions. Let The Utah Medical Journal live and grow through the efforts of those of us who are left behind!

GEO. L. SERVOS, M.D.

DEDICATED TO DR. FREDERIC CLIFT.

To him, who, in the battle of life, finds need, perforce, to stop and gaze into the dim uncertain gloom that cloaks the future; where eye would see or ear detect the progress of the struggle, and

the meaning of it all, there come the news. "A soldier has fallen—just a soldier of the common good."

Two-score years of service on the firing line. Through dark or light, through storm or shine, or good, or ill, has he paced his way, and done his best, that suffering man, or child, or mother dear to many hearts, might yet be spared to live; or pain assuaged; or cheery word of hope has spoken, that gave anew the light near lost; the heart near broken, healed by the smile and touch that gave,—from a heart o'erfull with love for his fellowman,—the thing most needful and best for each.

Here was a man, a friend, a Christian, not known at his best. For the act, to the public gaze, could only be seen as from afar. For him there was One who saw,—saw true. Only this mattered—Had he done his best? For this only he cared.

To one who has been the nearest confident for years, in the ranks to which he belonged; who shared his hopes, his fears, his plans, his battles lost; who in turn found a sure haven of peace, this loss will be irreparable. I knew his worries, and I knew his aims; the stories of success; and his doubts—always kept for me. Many an hour have we together spent, in plans,—always and ever for a bigger, a better future,—the central aim of each that he might the better serve humanity.

In his writings, as in speech, he aimed to cure some evil—to right some wrong. There is no man in our state who has attempted or accomplished so much in matters relating to medical laws. Always the same theme,—to improve conditions that the people would be better served, and disease prevented. He was working hard in the harness to this end, when the summons came. Through the pages of the Utah State Medical Journal, one may read what his efforts were; ever urging progress, improvement; and chafing under the lack of understanding and feeble support from

those who should have been his ardent champions.

But the eye of faith, and whisper of hope, tells me there is no death and were we able to take just one step more into the unseen world, we should find that this is true; for there should we meet our friend,—our brother.

When the days come,—and come they will, of which Longfellow wrote,—when
 "My life is cold, and dark, and dreary,"
 I shall—
 "Sigh for a vanished face, and the touch
 of the hand that is still,"

May I feel that a presence is near me,
 To counsel, to guide, and protect; which
 shall say with the still small whisper:

"Be still, sad heart; and cease repining;
 Behind the clouds the sun's still shining
 Thy fate is the common fate of all,
 Into each life some rain must fall;
 Some days must be dark and dreary,"
 Again I'll hope, and pray, and work;
 My heart shall fill with gladness sure;
 The day will pass, and I'll not shirk;
 The task will end—I shall endure,
 And when at last, my call I'll hear,
 Again we'll meet on yonder shore—
 The land of sunshine—I've no fear,
 For he'll be there to guide me o'er.

By J. E. MORTON, M.D.

THE GLASGOW LISTER WARD AND MUSEUM.

As a Memorial to the late Lord Lister, and as a means of perpetuating his memory in a way that it is hoped will prove both interesting and instructive to every member of the medical profession for all time to come, one of the wards in the Royal Infirmary, Glasgow, in which he worked out and first put into practice the principles of Antiseptic Surgery, is to be reserved and utilized in the following way. One part of the ward is to be refurnished as it was in his time with such objects as it may be possible to acquire; while the other part is to be made into a Museum for the exhibition of anything associated with the life and work of the great master. It is, therefore, asked that any who may have letters, pamphlets, books, or other objects of direct personal association with Lister and his work will either present or loan them to the Museum. Professor John H. Teacher, M. D., Hon. Curator of the Museum, will be pleased to receive any objects addressed to him at the Royal Infirmary, Glasgow, Scotland. The names of all donors or senders of objects are to be affixed to the exhibits.

ARTERIO-SCLEROSIS FROM A CLINICAL STANDPOINT.

W. T. S. DODDS, M.D.,

Indianapolis, Ind.

Arterio-sclerosis is a condition which is commanding more and more attention, and one which we think cannot be discussed too much or too often. The following article by Dr. Dodds, which we have extracted from the March, 1912, Medical Council, appeals to us and we believe, will be of value to our readers. Dr. Dodds has made the matter of diseases of the circulation a very close study and in his home city, Indianapolis, is considered an authority on conditions of this sort. We have asked the Doctor to become a regular contributor and it is very probable that we will receive some very interesting, as well as instructive articles from his pen.—Ed.

In the discussion of this topic I shall purposely avoid the more complicated and detailed pathological questions concerning the development of sclerosis in general, and confine my observation to those points which are common but at the same time valuable aids in diagnosis. I particularly wish to deal with the early symptoms of the beginning sclerosis, and point out to you the early manifestations of the symptoms which are easy to recognize and can be carefully correlated. Among the first causes in the production of arterio-sclerosis we find that age is one of the predominate factors. This does not mean, however, years so much as it means the condition of the artery itself. The axiom that a man is as old as his arteries are old remains an undisputed condition to this present day. We naturally expect to find the manifestations of sclerosis in individuals who have passed the three score years and are not surprised with the crooked hardened calcareous tube which once served as a pliable elastic artery, but it is when we find this disease in the man

young in years that we are surprised and put to a difficult task in arriving at a diagnosis.

Causes of Arterio-Sclerosis.

The causes commonly observed in the production of sclerosis in the young are distinct and clear. Syphilis probably heads the list as the predominating factor of endarteritis, and should be always sought for where the disease is suspected. The next factor in the production of this disease is our present manner of living. It is a common observation to see young business men with advanced sclerotic processes. The high tension necessary to the successful administration of great business enterprises, coupled with the exacting demand of our present social functions, gives us a hazardous enemy to overcome. The question of narcotics and stimulants, I believe to be secondary to these two great causes in the production of sclerosis, and close observation will probably lead you to the same conclusion. I do not attempt to affirm that the excessive use of stimulants and narcotics does not have its place in the etiology of this disease, but I do not believe they obtain to the prominence which has been ascribed to them. The common observation of the medical fraternity will uphold this statement. We do not see the evidence of sclerosis in the alcoholics of forty-five nearly so frequent as we do in the syphilitic or the overworked neurotic business man.

Intemperance in eating is another common cause in the production of arteritis. This is especially true in connection with rich proteid diets. We do not infrequently observe rather high degrees of arterio-sclerosis in old consumptives who have for years consumed enormous quantities of rich proteid food. The body is capable of assimilating

ing and approximating certain quantities of protein material. When this amount is overfed the excessive quantity becomes waste material and is stored up in the circulatory system, as an irritant, which must be eliminated at the expense of the kidneys. We find that gormandizers are particularly prone to plethoric conditions and constantly show a blood pressure higher than normal. This condition is undoubtedly the result of overeating, and especially of too rich proteid diet.

Another common observation in sclerotics is the small amount of fluids which these individuals consume in comparison to the amount of solids which they eat. In most instances it will be found that the taste for water is repugnant, and the only fluids taken are in the form of beverages, such as coffee and tea. This factor alone when considered with the enormous quantities of rich proteid food taken, easily demonstrates the density and richness of the fluids which the body must control. In this same case it will be observed that the amount of fluids secreted and excreted from the body is low in quantity and high in its solid constituents. This observation explains the numerous symptoms which we observe commonly in the sclerotics, namely, various neuroses and rheumatoid conditions. Excessive protein diet is conducive to more or less constipation which favors the development of intestinal putrefaction and fermentation. These processes carried on for considerable length of time result in an auto-intoxication, which produces irritation in the circulatory apparatus. The ptomaines, which are absorbed from the alimentary canal, produced by putrifying meats are one of the most important factors in the production of acute endarteritis as well as in the production of interstitial nephritis. The continued absorption of these ptomaines finally results in defective elimination, with the consequent inflammatory irritation,

which is at the basis of endarteritis and general sclerotic changes.

The absorption of these poisons, along with hard work and great mental activity, are responsible for the greater part of acquired sclerotic changes in the arterial system. These changes make themselves manifest by numerous clinical symptoms, which require some considerable study and investigation to clearly interpret them. These symptoms are usually obscure and ill defined, and are frequently attributed to neurasthenia and other neuroses.

The extra work brought upon the kidneys by the elimination of these toxins and poisons causes the altered physiological activity. This results in congestion of the secretory apparatus in the kidneys and the consequent destruction of the endothelial cells and interstitial substances. The prolonged irritation of these structures results in permanent disability to function, and nature is required to exert her efforts in overcoming the local disturbance. This is brought about by the series of conditions which manifest themselves by a general increased blood tension. The modus operandi of this increased tension is not clearly defined, but seems to be the result of a stimulation to the general circulatory apparatus. This theory most likely accounts for the disturbance which we find manifested clinically first in the kidneys. Close observation will disclose the fact that other organs are, perhaps, equally or even more greatly disturbed than the kidneys. This condition is observed frequently in the pulmonary structures, and is manifested by asthma and subacute chronic cough. The pathological entity in the lung is identical to that observed in the circulatory apparatus in the kidneys. This condition continues approximately with the same degree of certainty as we observe in the other structures.

Microscopic examination of the urine at this time will reveal large numbers

of red blood cells, frequently great numbers of hyaline casts and cylindroids; also, it is not uncommon to find a considerable desquamation of the endothelial cells lining the uriniferous tubules. Chemical examination does not reveal any pathological conditions other than the high specific gravity and an increase in the solid constituents of the urine.

Another etiological factor in the production of arterio-sclerosis is acute infectious disease, particularly typhoid fever. The long-continued course of the disease, with its accumulating poisons and toxins, makes arterio-sclerosis one of its common post-complications. Chronic lead poisoning and gout, with recurrent rheumatoid arthritis, is a common factor in the production of sclerotic changes. Inheritance should receive greater prominence in the etiology of arterio-sclerosis, because, as has been pointed out by many observers, whose families succumb to sclerotic changes early in life. This seems to be particularly noticed in children whose ancestry have been victims of alcohol. In the drunkard's children there seems to be more tendency to the disease than in the drunkard himself.

The consequence of high arterial tension is observed more frequently upon the heart. Long-continued high tension produces certain changes with the heart muscle, which are known and described as myocardites.

The changes in the heart that follow disease of the kidneys are very difficult to explain. In a great number of cases of acute and chronic nephritis there is an increase in the arterial pressure. If this increase in pressure lasts for more than four weeks, an hypertrophy of the heart develops. It follows, therefore, that hypertrophy occurs more frequently in chronic than in acute nephritis. In the endeavor to explain this rise of pressure and the con-comitant hypertrophy, we must first know what parts of the heart are affected. According to

V. Bamberger's statistics, the left ventricle alone is enlarged in about all the cases, while in somewhat smaller number both ventricles are involved. These figures, however, are based upon the apparent size of the heart or upon the measurements of the thickness of the muscular wall, disregarding the question as to whether the heart stopped in systole or diastole, and disregarding, also, the relation of the size of the heart to the total weight of the body. Accurate figures can only be obtained by weighing the different parts of the heart according to the method of F. Muller. In fourteen cases of chronic nephritis studied by this method, every portion of the heart, auricles and ventricles were found hypertrophied, in the great majority of cases the left ventricle being the most affected. These observations, in spite of the small number of cases, are of great value on account of their accuracy. Clinically, we frequently hear an accentuation of the second pulmonic sound in cases of chronic nephritis, an indication of increased pressure in the pulmonary circulation, which would ultimately result in hypertrophy of the right ventricle.

Not all diseases of the kidneys induce heart hypertrophy. It is frequently absent in the nephritides produced by toxic agents, such as arsenic and phosphorus, and in those associated with certain infectious diseases, as diphtheria and typhoid fever. In primary acute Bright's disease, which is probably infectious in character, and in nephritis secondary to scarlet fever, there is practically always an increase in the arterial pressure. Chronic interstitial nephritis is always accompanied by an enlargement of the heart, frequently of the most extreme grade. In the so-called chronic parenchymatous nephritis, hypertrophy of the heart is present in about one-half of the cases. There are no changes in the heart in pure cases of amyloid kidneys. It is important to note that when obstruction to

the flow of urine leads to renal disease, as from calculi or abdominal tumors, the heart frequently undergoes hypertrophy.

Any attempt to explain the heart hypertrophy that accompanies diseases of the kidneys must start from the fact that there is an increased arterial pressure. This appears before the hypertrophy. A rise of blood pressure, amounting to fifty millimeters of mercury, has been observed within forty-eight hours after the onset of an acute nephritis. The accentuation of the second pulmonic sound in many cases allows us to infer a corresponding rise of pressure in the pulmonary circulation. As has already been stated, this inference is borne out by anatomical investigations, for in 82 per cent. of the cases examined by modern methods, hypertrophy was present in all divisions of the heart, and in the 14 per cent., in which only the left ventricle was apparently affected, so much oedema was present that a slight hypertrophy of the right side of the heart might not have been demonstrable on account of the great weight of the body. It is possible that the hypertrophy of the left ventricle is more pronounced in the early stages of nephritis, and that it extends to the rest of the heart later. At any rate, in the great majority of cases of chronic nephritis, the heart, if affected at all, is affected in its entirety, and any explanation of the cause of the hypertrophy must take this fact into consideration.

Clinical Manifestations.

The clinical manifestations of arterio-sclerosis express themselves in groups, and these manifestations must be studied in conjunction before we are able to arrive at a diagnosis. The first and most common symptom is referable to the heart, and we find a number of conditions which leads us to suspect a pathological condition in the heart itself. It is hard to separate the cardiac and

renal cases, and this symptom, complexed, is usually associated in the consideration of the disturbance. The symptoms referable to the heart may be briefly summarized as shortness of breath, especially on exertion, often asthmatic or paroxysmal in character; palpitation, weakness; occasionally a considerable degree of nervousness; loss of memory and insomnia. In advanced cases of some sclerosis of cerebral arteries there will be more or less transient irrationality, (especially at vasomotor crisis of Pal). There may be pains over the pericardium, in the shoulders or down the arms, or in the abdomen or legs, which may be definitely associated with periods of high-blood pressure (the vasometer crises of Pal). There may be sudden pain and sudden paralysis of a leg, disappearing on rest, reappearing after a few steps are taken (intermittent claudication, Charcot, Erb), or there may be severe pericardial pain, with the feeling of weight and constriction over the sternum, and utterable fear of impending death (angina pectoris). On the other hand, the hand or foot may become cold or numb, the pulsation disappear from the arteries, intense pain set in (Raynaud's disease), finally followed by gangrene (thromboangitis obliterans). Still further, the patient may suffer from all signs and symptoms of aneurism.

Hirshberg, in 1882, called attention to the fact that changes in the retinal vessels constitute an early sign of arterio-sclerosis, and later demonstrated that this change was normal in old persons, and usually began in the fifth decade. Friedenwald and Preston examined twenty-five persons suffering from general arterio-sclerosis, and found only seven normal retinas among them.

The Xray offers an valuable aid in diagnosis in the sclerotic changes of the aorta and large vessels surrounding the heart. It is also possible by this means to determine the degree of scle-

rotic changes which are found in the abdominal aorta.

The blood pressure is usually high in arterio-sclerosis, and gives us one of the earliest aids in its diagnosis. The blood pressure of normal individuals is 10-130 M.M. of mercury. Numerous observations have been made which show that the pressure exceeding 140 M.M. for any considerable period of time is looked upon as pathological. We frequently find the blood pressure of 200-250 M.M. in cases which do not show any appreciable hardening of the radial or temporal arteries. Such a pressure should always be the ground of grave suspicion, and careful physical examination instituted to determine its cause. This will be found, as a rule, to be due to the excessive sclerosis of the larger trunk arteries. Pulse tracings usually show considerable variations in their general outlining, but are not reliable guides in early diagnosis. In later stages, where elasticity of the arteries is disturbed, we find valuable information from sphygmographic tracings.

Treatment.

There is no specific treatment for arterio-sclerosis. There are a number of points to be taken into consideration in the care and management of these cases. The foremost is rest. Rest not only physically, but mentally and physiologically. The man with arterio-sclerosis is sick from the sole of his foot to the crown of his head, and every activity and function should be relieved as much as possible. Change of occupation and surroundings is of great benefit, and should be strongly advised. These cases do better in a warm, moist climate than in a cold, rigorous atmosphere. If possible, it is advisable that they spend their winters in the South and their summers in the North, or, in other words, follow the birds. Men who follow sedentary lives should be encouraged to take on some active mus-

cular exercise in the open, such as light horticulture, golf, boating and motor-ing. In patients whose occupation has been chiefly hard, muscular exercise, it is advisable to have them change to a lighter, easier occupation. These cases should be encouraged to take plenty of rest and refreshment in quiet, well-ventilated rooms, free from anxiety and strife. The simple life is a form of enjoyment which these individuals should be taught to cultivate.

Rest to the gastro-intestinal tract is as essential as rest to the mental and physical activities. It has frequently been pointed out that immediately following ingestion of food, the blood pressure begins to increase and the action of the heart is accelerated. Accordingly, the diet should be light, just enough to keep the patient nourished without giving him a sense of fullness, or to allow gas to form in the stomach and intestines. Distention of the stomach push up the diaphragm and causes the heart to lie more transversely in the thorax, embarrass its action, causing a diminution in the systolic output and an increase in the pulse rate. Not infrequently this is also associated with onset of pericardial pain and constriction. The lacto-cereal diet is the best, consisting mainly of milk, eggs, custards, junket, toast, zweiback, crackers. The numerous prepared cereal foods, which consist of partially toast-ed flakes of wheat, corn or rice, are particularly good, since much nourishment may be given in small bulk and in a form which does not tend to form thick, impenetrable doughy masses. Besides, they contain the bran, as well as the starch, and hence, by leaving considerable fecal residue, tend to keep the bowels moving. Meat should be given sparingly, partly because the prin bodies (xanthin, hypo-xanthin), tend to raise the blood pressure and increase the work of the heart, and more particularly, because the meat fibers are relatively

slow in digestion. For this reason it is better to take the proteid food in the forms mentioned above. Finely-hashed Hamburg steak, lamb chops or chicken are the best forms of meat.

However, in simple arterio-sclerosis the quantity taken at a time need not be so greatly restricted; but the total quantity in twenty-four hours should not exceed 2,500 calories, and should always be near the lower level for proteids, and as free as possible of purin bodies (nitrogenous extractives, such as are found in meat), creatinin, etc., and also of salt. The more recent studies quoted above seem to indicate that excess in salt is almost as injurious as are excesses in alcohol, and that the salt mackerel is as dangerous as the beer of Milwaukee. For the sclerotic, danger probably lurks in the smithfield ham or the cold smoked tongue, as well as in the Baltimore rye or the Martini cocktail (Beyer, Barie, Hadfield). The patient's safety lies in milk, eggs, potatoes, bread, other carbo-hydrates, butter and the simpler fruits. In addition to these articles of diet, it is sometimes advantageous to add some of the coarser vegetables, so as to give bulk to the contents of the intestinal tract. This is particularly true in cases where constipation has been a rule for long periods of time.

As to drugs, the iodides and nitrites have long held a favored place in the treatment of this disease. Potassium iodide is particularly useful in those cases where lues is suspected, and should be pushed to the limit of tolerance. Ordinarily, sclerotic cases take larger doses of the iodides than patients suffering from a usual non-specific disease. Next to the iodides come the nitrites in the treatment of this disease, particularly is this true where we have considerable disturbance to the heart and sensorium. The amyl-nitrites are particularly useful in the symptomatic treatment for the purpose of relieving pain and neuresthenic tendencies.

In the writer's experience, high blood pressure and cerebral symptoms are more easily controlled by a liberal administration of calomel, followed by some saline purge. The beneficial result obtained from this form of treatment is particularly gratifying to both patient and doctor. This procedure should continue for a sufficient length of time to reduce the pressure and relieve the symptoms of fullness and congestion. Where the conditions are particularly serious, I have often used a hot pack to produce diaphoresis. This extreme sweating should be accomplished with the patient in a reclining position by the aid of artificial heat. Where symptoms of giddiness appear this is easily controlled by the application of an ice-cap to the head.

It is possible with the above procedure to effectively reduce blood pressure and the feeling of well being without the administration of other procedures. I do not favor the use of cardiac stimulants and sedatives in the symptoms referable to the heart in this disease until simpler measures prove of no avail. Where the heart refuses to react to these simple procedures, I find that absolute rest in bed upon a fluid diet, together with an ice-cap to the pericardium, it quiets down and resumes its normal action. The neurotic symptoms which accompany this disease are best controlled by hydro-therapeutic measures. It is sometimes necessary, in addition, to use some of the nerve sedatives for a short period of time until the symptoms disappear, after which graduated physical exercise in the open will usually suffice for their abatement. The symptoms referable to the stomach are ordinarily controlled by the regulation of the diet. In instances where this does not suffice it is advisable to administer some of the tonics. These are best given in the fluid state, because of the stimulation to the secretory glands, which is essential to complete digestion.

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John N. Hurty, M.D., Indianapolis, Ind.

1915.

In 1915 San Francisco and the West will celebrate the opening of the Panama Canal with a big exposition in the metropolis of the Coast. This will be the largest world's fair yet held. Not only will there be this big show to attend, but the visitor will be brought in contact with the many wonders of the West. Nevada will not suffer because of this exposition. Many will come by auto and will pass through the "Battle Born State," and will see many things which escape the eye of the tourist passing through by train. There is a movement on foot to bring the annual meeting of the American Medical Association to San Francisco during the fair, and this should be done, by all means. Nevada's doctors should, if necessary, make a special effort in this direction and should send a goodly lot of "boosters" to the 1913 and 1914 meetings of the association. There is a lot of ground in Nevada yet to be colonized, and it is possible that some of the doctors attending the 1915 meeting of the A. M. A. in San Francisco will take advantage of their "stopovers"

and visit some of the garden spots of Nevada.

REPORT OF STATE HYGIENIC LABORATORY.

For some reason or another, the Nevada Hygienic Laboratory makes its report only every other year. That embracing the time between January 1, 1911, and December 31, 1912, is now before us. Owing to the fact that this is one of the healthiest states of the Union it is probable that it is not absolutely necessary to make reports with greater frequency.

The number of examinations made during the two years were about 700, of which over 300 were Widal tests, to determine diagnosis of typhoid fever, with 32 per cent. positive, 13 per cent. suspicious and 55 per cent negative; 200 or more examinations were made of sputum to determine tuberculosis, of which about 33 per cent. were positive. It is gratifying to know that but few cases of this disease originated within the state. About 100 cultures of throat swabbings were made to determine diphtheria, of which 25 per cent. were positive, the balance negative. Of this

number upwards of 60 per cent. of the examinations were made in 1911, with 40 per cent. of that number positive. In 1912 out of 20 cultures made but one gave a positive, and four cultures were made in this case. Twenty-five per cent. of the blood smears, made with idea to determine malaria, were positive of the 50 examinations made. All but four cases were of the tertian type. Of the three examinations for hook worm, one was positive. One case of meningitis, due to influenza, rather than meningococcus, was found. One case of infantile paralysis came before the attention of the laboratory during 1912. During the examinations to determine diphtheria, two cases of sporothrix infection were found, the only cases of this infection reported in the United States. No cases of rabies were reported as prevalent or originating within Nevada, although the disease was occurring with more or less frequency in two adjoining states. One dog, from an adjoining state was examined, the test being positive. An epidemic of this disease is anticipated, possibly in the near future. The laboratory has made examinations of the water from several of the larger towns and cities of the state, as well as of milk, as supplied by the dairies. They make a few very pertinent remarks relative to the latter supply, which we believe should be distributed generally about the state. The laboratory recommends the use of the immunizin phoid vaccine, and promises to furnish it to the physicians of Nevada early in the present year. Several public health lectures and talks have been given in Nevada during the past two years, with the idea that "Sanitary Instruction is More Important Than Sanitary Legislation." The laboratory desires to broaden the education of both the medical profession and the public at large, as regards the subject of public health and invites requests for information, with such end in view.

Although the report is short, covering less than 15 pages of printed matter, it contains many ideas which are worth while. It is possible that, as Reno, the site of the laboratory, is located in the extreme northwest corner of a large territory, this institution is not called upon to make many tests which would come to it, were it more centrally situated. As the report says, owing to extreme distances, but few samples of blood, in suspected cases of typhoid, were forwarded to the laboratory for the purpose of having cultures made. It is likewise very probable that numerous other samples, not only of typhoid blood, but diphtheria swabbings, Widal's, and so forth, failed to reach the institution, simply because of distance and time required to have sample reach Reno and report to be received by sender.

For the two years work of the laboratory but the insignificant sum of \$10,000 is appropriated, and every cent of it is used up. Twice or thrice this amount should be appropriated, and with profit to the state, as it would mean that the staff of the laboratory would not only be able to travel about the state, but could employ sanitary officers who would make regular visits to the cities and towns and see that the people be educated in sanitary matters to a greater extent. Such a fund would allow of lectures and talks being given in every community within the state. It would likewise allow of a campaign similar to that instituted by Dr. Dowling in Louisiana, whereby that state was cleaned up from end to end.

If the state hygienists were to visit many of our towns they would be surprised to see many of the existing conditions. They would find many, if not a majority percentage of our dairies far from clean. They would find our abbatoirs absolutely filthy in the vast majority of instances. In the latter they would find the slaughtering pens in close proximity to cattle and hog

runs, if not attached thereto. They would find hogs being fed upon the offal from the slaughtering pens. In other words, they would find the condition deplorable in the local slaughter houses. They would find numerous sophisticated food-stuffs being offered in our markets, such as catsup containing 1-10 of one per cent of benzoate soda; peas and beans colored with copper sulphate; stawberry jam containing analine dyes; candies carrying artificial coal-tar colors; as well as many other things, not absolutely contrary to law, but more or less harmful to the health of the people. If the state placed the hygienists in a position to carry on an educational warfare, but very few statutory enactments would be necessary in order to force a better condition of affairs. The plan adopted in Westfield, Mass., could be well followed out in Nevada. Instead of sending out inspectors from time to time to purchase samples of food-stuffs to be examined later within the laboratory, and probably forgotten, or the reports of findings overlooked, let the laboratory send out men who will not only make such purchases, but demonstrate, at a mass meeting of the people of the community, the condition of the foods examined. There should be a food exhibit in every town of any size, at least once a year. The good should be shown as well as the bad. If a campaign of education of such sort were carried on the legislature would have but little to do, as regards the enactment of any laws relative to the subject, as the people would take the law into their own hands, and within a very short time it would be impossible for any sophisticated food to meet with sale within the borders of Nevada. Money used in this manner would be well spent, and any early objections to an increase of the appropriation would melt away as rapidly as does ice under the rays of the August sun. The people of Louisiana at first objected to giving Dr. Dowling

either money or even power to carry on his campaign, but today would increase his appropriation and power, as they look with pride upon that which he has attained. Prof. Allyn of Westfield met with opposition when he started out to throw sophisticated foods out of Westfield, but today you could not hire a single resident of that town to combat a single act of his, looking to a betterment of the conditions. Dr. Dowling had, of course, to work under man-made laws in the beginning, but today the first law of nature, self preservation, rules in Luoisiana, as the people of that state have been educated to the fact that cleanliness is a necessity, would they continue in health. They no longer interfere with the Doctor, but give him every possible assistance in his work. Prof. Allyn ignored the man-made laws from the beginning. He did not deny that certain sophistications were allowable under the laws, but he showed his people that foods so contaminated were more or less dangerous of consumption. He did not tell the people that they must not eat such foods, but that it would be better did they not. He appealed to their higher sensibility, and with the result **that not a single sophisticated food can be sold in Westfield**, regardless of the fact that man-made laws allow such sales to be made.

Our State Hygienic Laboratory is doing all that it can be expected to do, under the conditions. It is endeavoring to educate the people of Nevada, as far as its funds will allow, in hygienic and sanitary matters. While it may not be possible, for the present at least, to obtain additional funds, whereby this sort of work may be carried on to a greater extent, we believe, as time goes on, and other communities demonstrate to our people the beauties of educational campaigns, plenty of money will be forthcoming to carry on this great work. We would suggest that, instead of biennial reports, they

be made annual matters, in that we may keep in closer touch with the workings of the laboratory. We would like lists of other than tests to determine diagnosis of infections. We would like reports on findings in tests made upon suspected food-stuffs, and believe that such results should be issued, not only in the shape of official reports of the laboratory, in book form, but should be given to the press of the state. We believe that this latter should be the law; that is, the reports should be given publicity through the press of the state. Such information would let every person within the state know just which foods were good and which were not. Let such publication be paid for, if necessary, from the funds appropriated for use of the laboratory. It will be a profitable investment, even though it may not show a direct return, in the

way of dollars and cents. It will mean that the manufacturers of sophisticated foods will not come into Nevada with their wares, for the simple reason that the people of the state will have none of them. It will not require any action of the legislative body to accomplish such a condition of affairs, as an educated people will not be imposed upon, no matter what the laws, relative to the subject may be.

The work of the laboratory is good, but let it be broadened, as outlined above, so that it may more greatly active, both as an educational and executive force. Such an institution lends more to the general prosperity of the people of a community than does any other one thing, and on this account it should be fostered in every conceivable manner.

LEUKOCYTIC EXTRACT IN PUERPERAL MANIA.

REIN K. HARTZELL, M.Sc., M.D.,
Reno, Nevada.

So various are the manifestations of mental aberration, so many of the faculties involved, so different the degrees of deviation from the normal, that experts hesitate and most of them fail in their efforts to rigidly define insanity.

Lord Justice Blackburn, a noted English jurist, in giving evidence before the House of Commons, said: "I have read every definition which I could meet with, and never was satisfied with one of them, and I have endeavored in vain to make one satisfactory to myself, but I verily believe that it is not in human power to do it."

Even the efforts of men of such eminence as Spitzka, Maudsley, Kirkbride, Regis and Hack-Turk have failed.

The same difficulty applies to a rigid classification of insanity. The Statistical Committee of the Medico-Psychological

Association of Great Britain have given the medical profession a classification. Maudsley has given us what he calls a grouping. The Congress of Paris has given us another. Regis and Krafft-Ebing have also drawn up schemes, but it remained for Kraepelin, who has done so much in recent years, to try to bring the chaos of classification of insanity into a clearer light, and who by his example has so greatly stimulated the study of psychiatry, has adopted a classification, and given it to the profession, which beyond any doubt is the least difficult and forbidding to the average student and general practitioner.

Most classifications, in fact all, except Kraepelin's, are interesting to the specialist, because they are impracticable, and more or less mystifying, and from a point of actual utility are worth-

less. In the case I am presenting to you there is practically no question as to its classified position, it being puerperal in point of time and in its etiology factors.

In the puerperal state, pregnancy, partuition and lactation diminish the vitality of women, weaken her organism and provoke a commotion in her nervous system. It is therefore not beyond our understanding that the development of psychoses of various kinds develop in woman during the puerperal state, and particularly those with unstable nervous systems.

These psychoses, however, may not be due so much to the physical stress of labor as to the undoubted auto-intoxication from poisonous substances, absorbed from the catabolic changes during the process of involution of the uterus, and the disturbed digestive functions incident to the puerperal state.

Puerperal insanity is an auto-intoxication, and perhaps of a kind of and nature of which we know little, and of which text books, statistics and clinical reports tell us less.

Volumes have been written on the general etiology of insanity, but as yet we cannot define accurately any given form of insanity as due to any given cause, and possibly we may never be able to do so. Heredity, anatomical and physiological stigmata, facial asymmetries, palate deformities, anomalies of the teeth, tongue, lips, nose, eyes, ears, etc., all have their predisposing influence upon the etiology of insanity, and which we all concede, but of the exciting causes we know little or nothing. The puerperal state is responsible for 12 per cent of the insane women in this country. Insanity in women, in other words, has its origin at the epoch of reproduction. The majority of these cases occur during partuition, a small proportion during lactation, and a still smaller proportion during the period of pregnancy. In the latter two periods

of the puerperal state, the form of insanity usually assumes a melancholy type, or a neuresthenia, or a stuporous insanity.

Acute hallucinatory paranoia and mania occur principally following partuition. In the four cases which have come under my observation, insanity occurred during partuition, and in this case, while the patient had short depressive periods, mania was more or less constant.

History. Mrs. L. F., brunette, American, aged 29. Fairly well developed, but poorly nourished. Born at seven months.

Family History. Negative to insanity, tuberculosis and syphilis.

Previous Illness. Negative, other than diseases of childhood. Always an extremely nervous girl. While at work in a drygoods store, when quite a girl, she had a fall which injured her spine and for which she was given treatment.

Menstruation. Began at 11½ years. Dysmenorrhea up to time of marriage, lasting 6 to 7 days.

Pregnancies. Primipara.

Physical Examination. Skin—Dry, parched and of a yellowish hue. Eyes appeared sunken and dark circles around them. Pupilar dilatation was present. Tongue was heavily coated and breath very offensive.

Heart—Normal, except for rapidity (112) and accentuation of the second sound.

Lungs—Normal.

Abdomen—Flat, but on deep palpation, fecal impaction of the intestines could readily be felt. Constipation severe.

Liver and Spleen—Apparently normal.

Vaginal Examination—Uterus retroverted, the fundus lying against the sacrum, and enlarged. A slight but inoffensive discharge. No lacerations.

Kidneys — Urine (per catheter) showed a great deal of sediment, high-

ly acid, and a sp. gr. of 1028. Albumin only in a trace. Indican in a greatly increased quantity, equally as well as the chlorides, sulphates and phosphates. Bacteria occurred in great numbers.

Mental Examination. Her speech was very abusive, given freely to profanity and obscene words. She was destructive and would fling anything within reach. She refused medicines and nourishment. Upon several occasions she would void her excrements carelessly. She had no suicidal tendencies. She would continuously demand her release, arguing that her confinement was against the wishes of her Creator, since He had commissioned her to preach His word to fools like us, meaning the nurses and doctor. Her invitations to send us to a warmer climate were constant. Her attempts to escape were cleverly planned, so that she was placed under constant guard.

At times her violence was so great that our only procedure was to place her in a camisole. For many days she refused food, claiming that we were attempting to poison her, and that we had murdered her baby and her husband and father, and that we were planning to end her life in a similar manner. These outbreaks of mania were all preceded by a period of depression which lasted from two to seven days. During these depressive periods she would persist in covering her head with the bed clothes, almost as if she were ashamed of her conduct on the days preceding. She would not speak a word and would refuse all nourishment and medicines. The accelerated flow of ideas during the periods of mania were mostly a chaos of words, and her delusions were not systematized except as above mentioned. Entire loss of inhibitory control of ideas was shown in her absolute lack of modesty, in the tendency to the employment of vulgar and obscene words and expressions.

History of the Accouchment. For this history I have been dependent upon the notes of the nurse in charge of the accouchment, since the case did not come under my observation until two and a half months following parturition.

A well developed, healthy female child was born March 11, 1911. Labor normal. Mental condition normal at time of delivery. On the fourth day following parturition, she was allowed to sit up. She was given bi-chloride douches two to three times daily. The lochia ceased on the seventh day. On the eleventh day following parturition she was taken to her home, a distance by train of 144 miles, thence by automobile eight miles. On the twelfth day after parturition she became hysterical, crying constantly, and at times raving and threatening in her speech. She was returned to a hospital, where she underwent treatment.

Treatment. When the patient came under my observation she was being detained in a private house. I had her removed to a hospital, and after such preparation as was possible, I performed a dilatation and curetage. The uterine cavity was swabbed with a 10 per cent solution of iodoform and ether and then packed with sterile gauze, with the hope of overcoming the atonic uterine condition.

Patient recovered from the anesthetic (ether) very rapidly. On the day following operation she was given leukocytic extract (twenty million to the dose) hypodermatically every four hours, and which was continued for a period of three weeks. At the end of this time the dosage was reduced to four times daily. In conjunction with leukocytic extract, she was given high rectal lavages of hot normal salt solution twice a day. At night she was placed in hot salt baths, and each morning given a cold sponge. Twelve and one-half grains of medinal were given each night with a glass of hot milk, and

which produced a restful sleep, lasting from seven to nine hours.

At the end of two weeks her condition was so much improved that I reduced the rectal lavages to once a day. Her skin lost its yellowish hue, the pupilar dilatation disappeared, her facial expression grew cheerful, her appetite became voracious, and her general conduct was greatly improved. Her belief that we were attempting to poison her disappeared, and she would at times converse very intelligently about her child and family.

Her intellectual faculties, however, remained more or less disturbed, but there were no aberrant manifestations of motor impulses, such as originally existed.

This general treatment was discontinued, and the patient discharged. At this writing the patient is in personal care of her child and household.

Did Leukocytic extract have any value in the treatment of this case, and upon what basis or theory was it employed? This question you will naturally ask of yourselves.

Personally, my knowledge of the value of leukocytic extract, in the treatment of many septic and toxic conditions, prompted its use primarily. I have no knowledge of its employment in a similar instance, and if it has been used it is not of record in medical literature. The basis upon which its use was employed, in this instance, was upon the firm conviction that the puerperal insanities are auto-intoxications. Researches in physiological chemistry have established that auto-intoxication from the poisonous substances generated in the alimentary canal, by putrefactive and fermentative processes, and in the uterus from the catabolic changes during involution, by a perverted chemistry, is a real thing, and a frequent factor in the etiology of nervous disorders, such as neurasthenia, hysteria and even the greater maladies,

such as melancholia, epilepsy and mania.

These chemico-physiological researches have further shown that an excess of ethereal sulphates (Indican) in the urine, in connection with other symptoms, is an index of auto-intoxication. Believing, therefore, that the condition was one purely of toxicity, the problem of establishing complete elimination, in order to effect a cure, was my principal aim. This I believe was accomplished in two ways: first and foremost by the use of leukocytic extract, and, secondly, by the rectal lavages with normal salt solution. Under this treatment the excessive indican disappeared, the bowel actions became normal, her mental condition cleared, and her general physical condition improved rapidly. In advocating the use of leukocytic extract in puerperal mania, I unfortunately can do so with but one case to report with. I do not advocate the use of leukocytic extract as a specific in mental aberrations, but I do say that it is my belief that in mental aberrations resulting from auto-intoxications incident to the puerperal state, it has great value in bringing about elimination of the toxic substances, which, to my belief, are the exciting causes of these mental perversions. The question might be asked, would not the patient in time get well without any treatment? There is no way in which this question can be definitely answered. It is true that a small percentage of the puerperal insane do get well with practically little or no treatment, but it is the larger percentage, where the toxemia is intense, as in this case, who do not recover and who become chronically insane. And it is this percentage who fill our asylums, who become public charges, and whose families are subjected to grief and suffering, that we must give our scientific and experimental attention to prevent. When we consider the fact that 12 per cent of the insanities in

women to be found in our asylums today have their origin some time during the puerperal state, we cannot help but recognize the necessity and expediency of scientific work in this field of medicine.

In a recent issue of the *Paris Obstetrique*, Pique publishes an article on the puerperal psychoses, in which he very forcibly denounces the commitment of puerperal insane women to asylums. He believes that this form of insanity is merely a delirium occurring during the puerperal period and finding its exciting cause in a latent infection of uterine origin, and furthermore states that the majority of these cases do not receive the attention that they merit. He cites a case that came under his observation some time following delivery, in which a sub-acute infectious arthritis produces a psychosis, which was speedily cured after surgical treatment. He further comments on the number of cases of women committed to asylums with puerperal psychoses, with great apprehension, and shows no hesitancy in asserting that asylums are not equipped for the treatment necessary in these cases.

In conclusion, I would like to advance a thought with reference to our asylums. It is only within the last century that insanity has come to be looked upon as a disease. In Christendom the insane were believed to be possessed of many devils and accursed. Among the Mohammedans it was believed that the souls of the insane had been removed early in their lives by God, and such removal gave evidence of a special mark of favor, and that they therefore were blessed. But in later years it came to pass that society had to be protected, so that in many portions of the world the insane were fettered in the cells of jails and solitary towers. In the records of the Bethlehem Hospital (Bedlam, England), we read of Norris, a patient who for twelve years was kept in a cell with an iron collar

riveted around his neck, and by means of a chain fastened to the wall.

The great and first object was to protect society from lunatics, by erecting special buildings for their commitment and custody. These buildings were not recognized as hospitals for the treatment of a diseased condition, but more in the light of a penal institution. It is only within recent years that our present asylums are recognized as hospitals, and it is safe to say that a very few of our institutions are more than boarding houses for the mentally deranged. And I believe that the ideal which we are approaching each year, in placing our asylums upon a psychotherapeutic and scientific basis, has been, in a large degree, delayed by the spirit which a century ago first erected special buildings for the custody of the insane. The ideal institution for the treatment of the insane is approaching each year, and I believe that in the next decade much experimental and scientific research work will be done in this unlimited field of medicine.—Read before the Nevada State Medical Society, October 10, 1911.

What She Saw.

A little girl was having her first ride on a big steamboat, crossing the Atlantic. The captain was explaining numerous things to her, among them his telescope.

"Now, what would you like to see through it?" he asked pleasantly.

"I'd like to see the equator."

The captain pulled a hair out of his head and holding it before the telescope, bade the little girl look. "Do you see it?"

"O, yes," she said, "and there's a camel walking across it."

An Absent-Minded Doctor.

"Yes, my dear; my husband is a doctor and a very charming person, but awfully absent-minded. Imagine that during the nuptial ceremony, when he took my hand to put on the ring, he felt my pulse and told me to put out the tongue!"

MISCELLANY—Continued

WANTED—Position. Male nurse or attendant. Good dresser. Can massage. Thoroughly understand drugs, long experience, no objection to travel. Highest references. Address D. W. Turner, Vermejo Park, New Mexico.

Dr. R. C. Quick, a dentist located at 306 Temple Court building, corner Fifteenth and California streets, will divide a suite of three rooms with one or two ethical physicians. He has been established in this location for the past eight year.

The Choice of a Reconstructive After Pneumonia.—The hypersusceptibility of a patient after pneumonia to tuberculosis emphasizes the need for more than ordinary care in the selection of a reconstructive for the convalescent period. In line with this point the first requirement to be made of the reconstructive is that it possess the power of charging the exhausted tissues with nutrition and thus renew the ordinary resistance against tuberculous invasion.

A further necessary quality of the reconstructive selected is palatability. Cord. Ext. Ol. Morrhuæ Comp. (Hagee) fully meets these several demands, as a result of which it proves a most reliable and satisfactory reconstructive agent in pneumonia convalescence.

The value of this cod liver oil product for the purpose named is so generally accepted that, with many physicians, its administration is a routine practice. The advantages of Cord. Ext. Ol. Morrhuæ Comp. (Hagee) lie in its proven therapeutic power and its very acceptable character.

Convalescence from the Exanthemata.—The first two or three months of the year are usually characterized, in the experience of the family physician, by the occurrence in his practice, of a crop of cases of the contagious diseases of children, especially scarlet fever, measles, German measles, etc. This is accounted for by the readiness with which contagion is spread in the schools, when ventilation of the school room is the least perfect and the closer housing of school children during school hours favors the distribution of communicable diseases. As the diseases in question are self-limited in nature, expectant and symptomatic treatment, together with precautions as to isolation, etc., is about all the physician is called upon to direct. It is well known, however, that in all but the mildest cases, the adolescent subject of scarlatina, or measles, is usually more or less debilitated or devitalized, when convalescence is established. Special care should be taken to avoid the administration of any tonic or reconstituent which is likely to disturb the child's digestion or, by inducing constipation, to minimize the appetite or desire for food.

Pepto-Mangan (Gude) is the ideal reconstructive tonic for these young patients, because it is pleasant to the taste, easily toler-

able by the stomach and readily assimilable by blood and tissue and promptly efficient in restoring appetite, strength, color and general well-being.

After the Baby Comes.—The weakness and debility which usually follow childbirth are all too prone to linger. The burden of lactation is very apt to further prolong convalescence and increase the liability to all manner of complications. In such cases, vigorous tonic treatment is urgently required and the resulting reinforcement of vital processes promptly change the situation.

Gray's Glycerine Tonic Comp. is peculiarly serviceable as a reconstructive and restorative for the nursing mother, not only because of its notable efficacy in promoting functional activity throughout the body, but especially because of its freedom from all contraindications. Thus it can be freely administered both during pregnancy and thereafter without a fear of its producing any but the most substantial benefits to the offspring as well as to the mother. Few remedies are more effective for increasing the lacteal flow than "Gray's," inasmuch as it exerts its influence through improving the whole bodily nutrition rather than by stimulating a single function at the expense of the rest of the body.

Rheumatic and Neuralgic Conditions.—"It is during the spring months more particularly that the physician is called upon to treat patients, who though not ill enough to be in bed, are not at all well. Their appetite is capricious, they sleep indifferently, or even if they sleep soundly they are not refreshed, and in the morning they are almost as fatigued and ill at ease as was the case on retiring. Upon awakening there is frequently an aching sensation in the loins, sometimes in the lower limbs, which may partially wear off as the day progresses, but there is at all times a vague, undefined, uneasy painful feeling.

The symptoms are very much like those experienced in malaria, but the causes are entirely different and a different treatment is necessary.

This condition arises from the fact that in the spring the eliminative functions do not present their usual activity owing to the torpor and locked-up secretions which have existed during the winter months, when the skin neglects its duties and the kidneys are overworked.

If the condition remains neglected the probable result will be sooner or later a pronounced attack of rheumatism or grippe in one or another of its forms. All that is needed to induce such an attack is a sudden change in the weather or the exposure on the part of the patient to cold or wet or to a combination of both. This is due to a latent diathesis to which every adult is liable.

The necessity of a powerful eliminative

in every prescription for rheumatism and grippe is self-evident. While anti-pyretics and anti-periodics may slightly stimulate the excretions and relieve congestion, thereby controlling certain features of the disease, a complete cure cannot be expected until the poisons are thoroughly eliminated from the system and the diseased organs enabled to resume normal functions.

In the treatment of all rheumatic, neuralgic and grippy conditions, Tongaline, by promoting the absorptive powers of the various glands which have been clogged, and by its stimulating action upon the liver, the bowels, the kidneys and the skin, will stimulate recuperation and prevent sequelae."

The Modern Treatment of Infection.—A new agent that will yield 90 per cent of recoveries out of a total of 400 cases of infection is worthy of consideration. The phylacogens, prepared by Parke, Davis & Co., are credited with this performance. Reports of the success attending the administration of these bacterial derivatives have been appearing with much frequency of late—reports so startling in their nature that one would hesitate to credit them were they not known to emanate from competent and conservative practitioners. These reports compel the belief that in the phylacogens we have a group of truly remarkable agents—products that will be makers of medical history; that are capable of producing results that may be designated as most unusual.

The phylacogens are supplied in rubber-stoppered glass bulbs of 10 Cc. capacity and are administered hypodermically. Five of them are now supplied and are obtainable from any druggist. They may be briefly described as follows:

Mixed Infection Phylacogen—Indicated in the treatment of all infections, acute or chronic, in which it is not known what particular micro-organism, if any, predominates—notably in surgical infections, abscesses, puerperal sepsis, eczema, fistulae, etc.

Rheumatism Phylacogen—Indicated in the treatment of any acute or chronic in-

fection caused by the streptococcus rheumaticus.

Erysipelas Phylacogen—Indicated in the treatment of erysipelas, i. e., the acute disease caused by infection with the streptococcus crysipelatis.

Gonorrhea Phylacogen—Indicated in the treatment of any pathological condition due to infection with the micrococcus gonorrhoeae.

Pneumonia Phylacogen—Indicated in the treatment of pneumonia or any pathological condition caused by the pneumococcus.

Complete literature on the phylacogens has been issued by Parke, Davis & Co., and may be obtained from the company's home offices in Detroit, Michigan. Physicians are advised to avail themselves of this opportunity.

Lubricating Jelly.—Lilly's Lubricating Jelly is a most valuable addition to the list of remedies and articles which the physician and surgeon must have in his office and hand case. It is at once available and convenient for lubricating specula, etc., before they are introduced. But more gratifying perhaps is the use of the jelly as a lubricant for the fingers of the hand employed in making a vaginal or rectal examination. Both the physician and patient are protected from infection.

The jelly is fat free, water soluble, slippery and sterile. Hands and instruments are readily cleaned when they have been coated with it.

There are other uses to which Lilly's Lubricating Jelly may be advantageously subjected. Antiseptics and frequent scrubbing of the hands are likely to produce a dermatitis. The jelly should be used to soothe the skin and prevent irritation. Certain skin diseases such as pruritus may be greatly mitigated by the application of the jelly. It is soothing and healing and can be used with much benefit in the eruptive fevers in which there are itching and irritation of the skin. Further information can be had by addressing the manufacturers, Eli Lilly & Company, Indianapolis.

Digitalis Efficiency **Digalen**

**A good thing to remember
when treating pneumonia.
Sample on request.**

*The Hoffmann-LaRoche Chemical Works
440 Washington Street, New York*

Denver Medical Times

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BACTERIAEMIA.*

WM. C. K. BERLIN, M.D.,

Denver, Colo.

The invasion of the blood stream by bacteria of different kinds is not so rare an occurrence as formerly believed. The tubercle bacillus is being recovered from the blood stream in increasing instances and especially in cases of military tuberculosis. The colon bacillus is being frequently found; the staphylococcus, streptococcus and pneumococcus are not of rare occurrence.

Adami gives the name "subinfection" to that class of diseases secondary to an original focus at some distant point, giving as an example the work of Macallum, who has shown that the flora of bacteria, and particularly the colon bacillus, inhabiting the intestinal tract, gains ready entrance to the circulation through the agency of the leucocytes in the tissues along the intestinal tract, and calling attention to the fact that alcohol alone does not cause portal cirrhosis, but only in conjunction with the colon bacillus gaining entrance to the circulation, and its haemolytic action. Latent infection is another term applied to a different condition. This is characterized by a recurrence of a previous infection. We are coming to believe that tuberculosis has its beginning in early childhood or adolescence, which becomes latent under certain environments, only to recur under different environments, such as over study, over work, exposures, etc. This latent infection may recur a number of times, but finally one sees cases in which there is no tendency to recovery, showing the resistance or immunizing properties of the blood and tissues to be exhausted or worn out.

In the case of bacteriaemias a similar condition occurs. It is very likely that many bacteria gain entrance to the circulation but are promptly destroyed, due to the bactericidal qualities of blood and other cells of the body. The leucocytes in the intestinal wall will carry bacterial flora into the circulation, and especially is this true when the intestinal intima has become inflamed or irritated. I think this is true of all inflammatory conditions, such as mixed bronchial infections, tonsillitis, gonorrhoea, typhoid fever, etc., but it is only when a lower resistance is present or when the immune bodies in the tissues and blood have become impaired, that we find this bacterial invasion permanent so that cultures are positive.

The colon bacillus is most frequently found in the circulation following intestinal disturbances. It was formerly supposed that an interference with the continuity of the intestinal tract was the cause of the migration of the colon or other bacteria, but I believe that inflammatory conditions of the intestinal tract with a corresponding lowered resistance will allow the migration of the bacteria and their growth in the blood. Over distension of the intestines with gas, causing a stasis, allows the migration of the bacteria. I think we find this condition in the sequelae or nephritis of scarlet fever, on which subject I had the honor of presenting a paper three years ago.

I have in mind five cases, all dissimilar in history and cause, which will now be described:

Dr. B. A dentist, age, 40. Residence,

*Read before the Medical Society of the City and County of Denver, March 18, 1913.

Meadville, Pa. I believe there was a suspected family history of tuberculosis. A number of years ago this patient had an abscess of the shoulder, and later became rachitic, which resulted in a severe lordosis. A year or so ago he developed a chronic febrile condition and was finally sent to Colorado for tuberculosis. After passing through many hands, I was consulted. I found that he had been treated for tuberculosis, both of the spine and lungs. On thorough examination no localized lesion could be found. Sputum examination was positive to a mild bronchial mixed infection. Moro's and old tuberculin tests were negative. There was a persistent indicanuria, with tympanites and indigestion present; yet withal a good appetite. The finger tips were clubbed and strong indications of a chronic septicaemia prevailed. The red cell count was low and leucocyte high. While making a stain for differential purposes, a germ-like deposit was noted and this led to a blood culture, which was strongly positive. A differential culture was made and the growth identified as colon bacillus. Under the supposition that an intestinal leakage must be present, a serial X-ray of the gastro-intestinal tract was made, which gave evidences that the first supposition was correct. An operation was refused at this time, on the plea that he wished to have a physician of Cleveland operate if this was necessary. I understand that later this physician was consulted, and after examination the patient was advised to return to the West or go home, as he was told he had tuberculosis.

Miss H. Age, 35. Private secretary. Family history unimportant. Has been troubled since 12 years of age with frequent recurring attacks of tonsillitis, until finally she was developing symptoms of rheumatoid arthritis with enlargement of second joint of fingers, which was aggravated and painful on using typewriter. She complained of

stiff, painful joints in other parts of the body. She was advised to have a tonsillectomy done, in hopes of bringing about an improvement of the rheumatic condition. She consented to this and the tonsils were removed about one year ago, but without desired results. On the 15th of October, 1912, I was consulted, and after obtaining a detailed history of her trouble and examination, she was referred for blood culture, which was positive—a streptococcus was found.

Mr. McD. Age, 41. Air-brake expert, Champaign, Illinois. About one year ago was required on an emergency to enter a locomotive which was yet very hot, and on coming out caught a severe cold. This resulted in a persistent cough, which lasted several months without much constitutional change. About June, 1912, the cough became more severe, with a progressive loss of weight until October 27th, when he was sent to Colorado with a diagnosis of tuberculosis. On physical examination no localized lesions could be found; sputum showed bronchial mixed infection; tubercle bacillus negative; Moro's test positive. An autogenous vaccine was administered, with only temporary relief; this failure, together with the appearance of an enlargement at the base of the right side of the neck, with persistent high temperature, led to complete tests. Red cell count was low, white high, stain negative. Referred for Noguchi and blood culture; both positive. The growth proved to be colon bacillus. Neosalvarsan was administered with only temporary relief, due, I think, only to the bactericidal effect of the drug. Three doses in all administered without permanent effect. I believe now that such a bacteriaemia influences the Noguchi positive. At this time a serial X-ray was taken of the gastro-intestinal tract. The findings were pronounced practically negative, except for a slight deflection of the cap of the duodenum and a possible doming

or raising of the diaphragm on the right side, with a thickening shadow extending upward. The enlargement at the base of the neck at this time became soft and crepitant, with a decided click or regurgitant sound under the stethoscope during respiration. A surgeon was consulted and he advised opening, which was done. A free discharge of gas or air occurred, but very little pus was found and this of a stringy character. A culture was made from this pus, but there occurred no growth. In a day or so the discharge from this wound became profuse, with a very offensive odor. The temperature persisted and was more on the septic order. In making an endeavor to find a connection with this abscess and the doming of the diaphragm, the abscess cavity was filled with bismuth and an addition X-ray taken, but this was negative; yet I believe the abscess cavity connected with a bronchus of the lung at least, for the reason that air or gas escaped during a severe coughing paroxysm. At this time two other consultants were called, but no definite conclusion was arrived at. It was concluded that further bacteriological study was necessary, and extensive blood cultures were made. A colon-like bacillus was grown, which did not correspond to differential tests, yet I believe it to have been one of the colon species. Finally it was agreed that the surgeon should use the exploratory and aspirating needle over the region where the X-ray showed the doming of the diaphragm. This was done completely, but with negative results. The man grew progressively worse and succumbed. It was not possible to secure an autopsy. This, no doubt, was a true bacteriaemia with the colon bacillus as causative factor.

Mrs. D. Age, 35. Weight, 85. Negative family history. Eight years ago, had a small tumor removed from left breast, following which she took iodid of potassium and pokeroor for some

time. Dating from this time she developed what was supposed, from her description, a membranous colitis, which persisted for some time, with improvement later. Three months ago she began to lose weight, feel badly, and was troubled with severe gastro-intestinal disturbances, which have persisted in the form of intestinal fermentation. Upon examination the patient was found to be ill nourished and anemic. Had a small moist spot at apex of left lung posteriorly. No ascitic fluid could be found, but she was persistently tympanitic. At the lower left side of the abdomen, a thickening could be felt. Vaginal examination showed this thickening to be connected with uterus and probably tubal. Red blood count, 4,004,000; haemoglobin index, 90%. No pronounced leucocytosis, urine negative, except indican. Blood culture positive. A leakage was thought to be taking place at the point of suspected tubal trouble. An autogenous vaccine was administered with no results, except possibly of raising her resistance to this bacteriaemia and some gain of weight. A surgeon was consulted and operation advised, suspecting a possible appendix complication in the pelvis. A cystic ovarian tumor was removed, together with a diseased appendix. At the same time the left kidney was found in the pelvis and replaced. There is still some doubt as to the point of entry of the bacteria causing the bacteriaemia.

Mr. H. Age, 16. Cripple Creek, Colo. Family history good. Has always been healthy. No previous sickness or infection. During one night of September, 1910, the patient was seized by a severe hematuria, with pain across the back and along the line of the right ureter. This attack lasted four weeks. After the bleeding ceased, convalescence from the anemia was rapid and seemingly complete. Since that time there have been six attacks with much the same history. Apparently each at-

tack was induced or preceded by exposure to severe weather or colds. Nothing is known of the physical condition during the interval between these attacks, as he was not examined or treated. The last attack occurred about the first of January of this year, and persisting, I was consulted. Physical examination showed considerable anemia, due to loss of blood. Not much loss of weight; was well nourished. Red blood count, 3,884,000. No leucocytosis. Blood stain showed few eosinophiles, but no other irregularities. Abdominal organs normal. Chest organs normal, except heart, which was hypertrophied, not compensating, and with a mitral lesion. Blood pressure ranging from 142 to 174. Urine, normal amount, heavily loaded with red blood cells, few leucocytes, and many blood casts. Catheterized specimen grew staphylococcus and colon bacillus. Blood culture negative. Serial X-Ray Negative. Cystoscope showed normal bladder. Catheterization of ureters showed hematuria of both kidneys. The segregated urine

was positive to pure growth of the colon bacillus on culture. The diagnosis in this case was arrived at by a process of elimination. Eliminating the possibility of hypernephroma, stone and renal varix, left an undisputed diagnosis of infected kidney. The mitral lesion of the heart would seem to prove a bacteriaemia preceding the infection of the kidneys. In the absence of the previous history of disease or infection, one might conclude one of three things had happened to cause this condition. First, he may have had a very mild scarlatina, and this condition was the sequela. Second, that during the severe exercise in the gymnasium he may have bruised or injured the intestinal wall, permitting the escape of an excess of colon bacilli. Third, the patient gives a history of eating confections to excess. There is a possibility of contracting an acute gastro-enteritis, with sufficient fermentation to cause a prolonged stasis at some point along the intestinal tract, permitting the escape of the colon bacillus in excess.

INJURY RELICS AND THEIR TREATMENT.*

J. K. MILLER, M.D.,
Greeley, Colo.

For several years I have been impressed with the indifference shown the little injuries and the minor features of more important traumatisms. An ankle or a wrist is sprained, a strip of adhesive plaster is wrapped about for a support and the case dismissed. A bone of the arm is broken, a diagnosis of simple fracture is made, a splint is applied and the patient turned over to time and nature to cure. If further consideration is shown to these injuries, it is usually at the instance of the patient's pain or discomfort. The relics resulting from these simple injuries are often permanent, because of the injur-

ies having been cared for by a routine treatment applied on the basis of a stock diagnosis rather than on the exact conditions to be met.

It is not uncommon to find cases wherein the feature that is regarded as the most important is in reality secondary. The fracture of a bone may not be as serious as injuries accompanying it inflicted on the soft parts, yet the diagnosis is one of fracture and treated largely therefor. The point I wish to make here is that the matter of deformity is considered of more importance than that of usefulness. The surgeon regards a deformity a much greater re-

*Read before the Weld County Medical Society at February Meeting.

flection upon his skill and judgment than maiming. This view is held by the laity also. A surgeon would have a much better case before a jury if he were able to present a straight limb with limited movement than he would have were the limb out of line with good movement. The jury, accepting the same view as the average surgeon who, as stated above, regards a limb partially out of line more positive evidence of his lack of skill than one partially out of commission, and directs its deliberations accordingly.

In amputations and in the severe injuries in or near joints, the intelligent, conservative surgeon has more or less regard for the usefulness of the parts. Even with him, however, there is too frequently overlooked contusions, swellings and rigidities which mean much in the way of comfort and much more in securing prompt and perfect restoration of the part or member to its former normal state. Disabilities are more common than is generally supposed, because the restricted movements are often not those ordinarily made in a casual meeting. Crippling of a greater or less degree is so common that even the laity look upon it as an unavoidable sequence, something supposed to follow naturally injuries of all kinds, particularly fractures. Many persons who have suffered from sprains or fractures about the wrist, elbow, shoulder, ankle, knee and hip joint, not to speak of the spine, may be found from whom abundant evidence may be adduced to show incomplete or imperfect restoration from damage done. This damage may be manifest in deformity, weakness or restriction of motion.

That perfect restoration may be obtained in all cases we do not claim, but we do assert that the per cent of resultant maiming that is usually obtained may be very greatly reduced. This reduction may be brought about, too, without danger toward an increase in the existing number of deformities. We

are simply to remember that associated with a fracture or dislocation, are other things which demand our attention, not only at the time adjustment is made, but after the removal of the splint and bandages. There is always more or less stiffness and restriction of movement as well as swellings to be cared for. These may in part result from the immobilized condition produced by the splinting, but not infrequently it is caused in no small degree by the forces causing the traumatism.

Temporary disability is therefore recognized as unavoidable. The patient as well as the surgeon expects and accepts it. But when the patient, on being relieved of all supportive and protective dressings, is dismissed with the assurance that time and exercise will remove all disability, he goes away with a wrong impression and the surgeon is very often culpable. Usually a rapid improvement takes place for a time, both in respect to increase of strength and action, and the case passes from the mind and notice of the surgeon rarely to be examined again. The exceptional cases are usually those where deformity is a sequence, or certain important movements so greatly restricted they afford cause for complaint. These turn up some six to twelve months after the time of injury. In cases where the disability is of less importance, complaints are less frequently made. The patient who is able to make all the more common movements is not inclined to complain when hampered in those seldom used. When charitable, these disabled patients attribute their lameness wholly to the severity of the injury, and gracefully accept the conditions as the best possible result that could be obtained under any treatment. This, no doubt, at times is the proper view to take. In any case, this optimism on the part of the patient must prove fortunate to the surgeon.

We do not hold that all these permanencies should be charged to the surgeon.

Neither could we claim that all cases following disability were restorable. The patient himself must accept no small degree of responsibility. Through neglect, indifference or with a view to economy, he oftentimes absents himself from surgical observation. However, when he does so ignorantly, the responsibility comes back again upon the surgeon, who has made no endeavor to impress upon him the necessity of further attention. So from one cause and another, there is a large number of disabilities existing which might have been avoided if proper care had been taken at a time when the malconditions were unorganized and impressionable.

It is not our purpose here to give the pathology of injuries and skin lesions in detail, as they can be obtained more readily from books.

Immediately following injuries, be they to bone or soft parts, nature rushes in with her repair forces to do all in her power to prevent hemorrhages and infections and to immobilize as quickly as possible loosened parts and fragments with a view to promote repair. As a result, to the pain and deformity consequent to the injury, are added swelling, tenderness and stiffness as conditions also to be met. This is more or less true in every case, and forms very frequently an essential part of the problem presented to the surgeon for solution.

To adopt the stereotyped method of splinting broken bones and allowing the fragments to coapt themselves through a sort of general line up with splints, is no longer considered intelligent surgery. Neither must it be regarded intelligent to disregard the suffering soft parts, even though the damage done to them does not seem specially serious. We would insist upon this particularly where the traumatism occurs close to the joint. Enormous swellings often present themselves, where they must of necessity be included with the

splints, making bone adjustments exceedingly difficult. The difficulty remains even when the X-ray has made the conditions knowable. It has long been customary in these perturbing cases for the surgeon to shift the responsibility as much as possible, allowing the patient to assume the consequences. This he does by informing the patient of the impossibility of knowing exact conditions to be met, and of knowing that the injured parts have been properly adjusted. The same obtains in subluxations and dislocations.

As a rule nature is a pretty good guide in her efforts to correct things gone wrong, but in the matter of sprains, broken bones, partial and complete dislocations, her methods can be greatly improved upon. In fact, intelligent interference is always necessary. Nature is wholly unable to replace dislocated bones, coapt misplaced fragments or approximate the gaping lips of wounds, though in her way she proceeds actively to fill in vacant places and to immobilize the loosened fragments. This she does through engorging with blood the vascular supply, and crowding with leucocytes and lymph the site of injury. Later with a view to afford better support and protection, she makes her work more permanent by organizing her repair material into new tissue. In her reparative processes, she does not always do the wisest thing—in fact, she is often guilty of doing the wrong thing when her work is viewed in the light of intelligent assistance. Needless ankylosis of joints, adhesions and nerve trapping bear evidence.

The general features in the treatment of injuries such as those to which we have referred above have remained practically unchanged for two generations. When present, deformities are still corrected, fractures adjusted, divided soft parts sutured, with much the same disregard for those features which are considered unworthy of a

place in the diagnosis as a generation ago. The treatment stops at about the same place as formerly. Even the old routine of using liniments is still more or less in vogue. Passive motion is a little more emphasized where articulations are involved, but muscular rigidities, chronic thickenings and swellings are still viewed as unavoidable sequences and left for time and nature to baffle with.

We believe there is here a serious oversight, if not gross neglect, in view of the advances made by surgery along other lines. With our advanced knowledge of pathology and the conditions to be met so well localized and so readily accessible, incomplete recoveries should be less frequent. The failure on the part of the surgeon to care properly for the minor features of injuries, passing them as unworthy of his consideration renders him blameworthy, inasmuch as they may and often do become a permanency and a sequela of an incomplete recovery. Ofttimes the patient is not particularly handicapped by the partial disability. Not infrequently, however, the crippling is found among the poor and laboring classes, people whose living is dependent upon their ability to perform physical work. To such it proves a serious matter.

Many cases might here be listed to prove the position above maintained. Within the past few weeks I have cared for no less than five crippled shoulders. The arms in two of the cases were wholly helpless. Both were results of accidents. One had been a fracture of the forearm, with more or less injury done to the musculature of the shoulder caused from the kick of a horse. The fracture had been properly set and union good, but five weeks after the splint and dressings had been discarded the member remained wholly helpless. The arm, hand and fingers were stiff and swollen. The patient could not open or shut the hand. All the joints were tender and were painful on mo-

tion. The surgeon who cared for her was a good man. After a few weeks had elapsed without the return of usefulness, she applied to him for further care, but he assured her that all that the parts needed was a little time and passive movement. As improvement did not come, and being dependent upon the use of her hand more or less for her living, she felt impelled to seek other means. She came to me, hoping electricity might prove helpful. Daily treatments were first given, and in the course of a week she was able to flex and extend her arm and the fingers of the hand in about the same degree. In the course of another week, being able to resume her work again, she dismissed herself—no doubt, on the basis of economy—though her recovery was not quite complete. This patient was a typical case for vibratory treatment from the first. While the bone was properly cared for, the soft parts which also suffered seriously from violence were quite as deserving of surgical attention. Through the application of two or three different modalities, rapid improvement began with the first treatment.

Another case was that of Mrs. H., who had injured her shoulder by a fall some three or four months previous to her visit to my office. She could not say just what diagnosis was made by the first doctor who attended her. After several weeks had passed without improvement under his treatment, she applied to another surgeon, who told her she had had a bone in her shoulder broken and that no man could do anything for it now, that her arm would always be helpless.

When I first saw her, she could use her hand to hold things, but her arm was wholly helpless and was lifted about by the other hand. Examination showed that serious injury had been done to the trophic nerves supplying the spinati muscles, as they were much atrophied, particularly the infraspina-

tus. We could not here promise a complete recovery, but as there was no joint involvement and as the rest of the musculature of the shoulder was uninjured, we felt justified in promising her much relief. After a week's treatment, she was able to flex and extend the forearm, could feed herself, put on her coat without help, could even place her hand on the opposite shoulder. At this point of the treatment she was taken sick and has not yet been able to return to the office. There is no doubt, however, but that her arm will be largely restored, save possibly in the making of a few movements in which the spinati muscles chiefly participate.

Mrs. B. had suffered many weeks with an arthritis in the right elbow. After the acute symptoms had subsided, the arm and hand were left swollen, tender and helpless. It was carried constantly in a sling and carefully lifted about by the other hand as necessity required. She was unable to extend or flex the fingers voluntarily, and passive manipulations gave her much pain and were exceedingly limited. Several months had passed with the arm in this condition without any manifest improvement, save there was less pain.

Her physician informed her that the only thing he knew to do was forcefully to break up the ankylosis of the joints under anaesthesia. She refused to submit to this procedure and had practically made up her mind to remain a cripple. After several weeks of patient, persistent treatment, her arm was almost wholly restored. The only relic remaining was a sudden locking of the elbow just short of full extension and of full flexion. This patient was a seamstress and her good right arm meant much to her, and should have been restored without so many months of pain and helplessness.

In the early care of injuries from violence and infectious inflammations, much time and suffering, to say nothing of expense, are saved by the use

of means similar to those indicated in the more chronic stages. In illustration thereof, would cite a case in that of a man of twenty-five who had received an injury of the wrist and forearm from a blow or fall—he did not know which, being too much under the influence of liquor. The injury was done two days previous to the time he applied to me for X-ray examination of the suffering member. The findings were negative and treatment was instituted at once to restore usefulness as promptly as possible, as the accident occurred in the midst of potato harvest. After an hour's work with different forms of vibration, varying in frequency from that of the hand to that obtained from the glycerine ball spray, the swelling of the hand and arm was almost entirely removed, and with it much of the tenderness. After paying his bill, he put on his coat, without assistance, stuffed his sling in the pocket and left the office. Later he told me that he proceeded with his work the next morning without an hour's further loss of time. In this case, there was without doubt, a saving of one to two weeks' time, besides the suffering of pain and inconvenience, not to mention the expense of liniments.

To these another class of cases may be added. The indurations and oedematous conditions following subacute and chronic skin diseases, the thickening of old ulcer sites, which not only disfigure but present a predisposition toward return, are not uncommon and are always a source of much annoyance. Sluggish wounds, wounds whose processes of healing have been interfered with by frequent gauze packings, suppurating wounds of long standing, all of which so often produce thickened, discolored and unsightly scars, can be cared for in a most surprising way by the use of some of the higher forms of vibration, particularly those of the static high frequencies. Where these processes involve the face, a small

clean, normal-colored scar means much from a cosmetic standpoint.

Desirable results are not often easily obtained. In fact, they are usually at the expense of a careful technique and an untiring persistence in the use of the various modalities peculiar to mechanical therapy. Rarely is one modality sufficient to secure the best results in a given case. In practically every traumatism and in every inflammatory sequel are found more than one condition to be met. Some respond to one form of vibratory stimulus, others to another, so that in treatment experience has shown it necessary to use vibrations of varying frequencies from those as slow as those given by the hand up to the higher static frequencies, even to X-ray.

The technique also must be modified according to the state in which the case is found, whether acute, subacute or chronic, suppurative, indurated or oedematous. A too stimulative application would prove as aggravating in one case as a too non-stimulative would prove disappointing in another. With the proper selection and adjustment, practically every case will be benefited, though all cannot be cured.

The medical profession does not appreciate this, as shown by the fact that seventy-five per cent of adult life is crippled in a greater or less degree in some way from injury relics. These may be thickenings about joints, muscle rigidities, torn ligaments, etc., half of which are or have been curable.

Vibration.

Vibratory methods of treating disease are in no wise modern. They were used in a crude way about as early as was medicine. Massage or rubbing, according to Homer, dates back to one thousand B. C. But the manner in which it should be done was not recorded until 484 B. C. and is accredited to Herodotus. Plato and Socrates advocated it and Hippocrates said: "Rub-

bing can bind a joint too loose and loosen a joint too rigid. That much rubbing causes parts to waste and moderate rubbing makes them grow." Many others of the early centuries recommended and practiced massage more or less intelligently. Among those who did so we find the names of Celsus, Paracelsus, Pare, Barclay, Ling and Mezger, of a little more recent time. The scourge, flagellation, slapping, beating, roller massage, etc., were methods used. Women in Rome permitted themselves to be whipped with leathern thongs as a cure for sterility.

Early in the nineteenth century, the Swedish movement cure was introduced by Ling. Some years later, Zander constructed various mechanical motion devices, for rheumatism, contractions, etc. Later, Taylor of New York and Kellogg of Michigan were inventors and users of various devices for massage, compressions and other manipulations. The first treatise on the subject was put out by Von Mosengiel in 1876. It was upon a physiological basis and scientific. It received the commendations of such men as Charcot, Esmarch, Billroth, Trouseau, Weir Mitchell, Brown Sequard and Playfair.

In very recent years, great progress has been made in this method of treatment. It is now quite universally accepted in one form or another by the profession and regarded a most helpful and scientific procedure in the management of certain abnormal conditions.

Vibration means a recurrent change of position. This may be fast or slow and may be brought about by manual manipulation, various mechanical devices, electricity, light, X-ray and chemical substances, such as those having radio-activity. With the great increase in the knowledge of these modalities and with the very efficient mechanisms at hand for their application, vibratory processes are becoming much more appreciated and their uses more clearly outlined. Old customs are often hard

to break up, but with present understanding of physiology and pathology more dependence must be put upon them than heretofore. The liniment doctor must become a back number. Already the intelligent physician regards the liniment largely as a placebo and apologizes for its use.

In closing this paper, allow me to say it has not been my purpose to con-

demn the active procedures so long in vogue in the treatment of trauma and inflammations, as to condemn the neglect to clean up the minor secondary conditions which are so often allowed to remain to become permanent. Our surgical patient should not be dismissed until all parts are fully restored. So soon as the profession so cares for these cases, the percentage of maiming now existing will be reduced one-half.

PSYCHOPHYSIOLOGIC THERAPY.

W. J. FAIRFIELD, M.D.,
Denver, Colo.

No studious, observing physician can advance far in the realms of pathology, without recognizing that if the function of an organ be maintained or restored, much of the destructive metamorphosis may be arrested and to quite an extent repaired; and he could not go far, groping for more light, without recognizing also that in every individual there are dormant hidden powers which, when called into action by extraordinary stimuli, will accomplish what would seem, to the uninitiated, beyond human possibility.

These latent energies of the body hold healing principles in great but unknown measure which, if given fair play, can become most active and potent.

All psychical treatment aims to at once establish a growing, educational, psychic expectancy in the patient, by consistent and persistent employment of rational suggestion to persuade, influence or encourage the functions of the nervous system through the conscious or the subconscious mind. The formula and technic of treatment may vary for each individual case and may be differentiated somewhat by each operator; but all the same the results are obtained in conformity with influences brought to bear by impressions from

without upon the psychophysiological functions.

We recognize two powerful forces of nature in the field. Arrayed on the one hand are the racial, inherited weaknesses, pathogenic microbes, ignorance and superstition; while on the other hand are the up-to-date totals of the accumulated knowledge of all ages, accentuated with the modern, trained human intelligence and altruism, great, good and growing powers—the heal helpers and champions of man. The struggle for supremacy between these two immense forces is history and the record of the progress of evolution; and the finish is not yet in sight. Practically applied knowledge, backed by the science of today, is gaining victories for the whole of mankind.

Perhaps no department of science has advanced so rapidly within the last two or three decades as that of Medicine, unless it be in the electrical field.

Modern Medicine, in its wonderful strides, is reaching for rational psychic diagnosis and rational psychotherapy. Professor Freud of Vienna in presenting and demonstrating his psycho-analytic form of psychotherapy is interesting the whole medical world. In his practice he seeks to determine and

remove the disturbing mental cause of certain symptoms resulting from a psychic trauma—some inharmonious, incompatible idea, which inhibited in the mind, engenders mischief in phobias, obsessions and various hysterical phenomena. His methods of diagnosis and psychotherapeutics are full of promise.

Other medical writers and teachers of note are ably advancing the science of psychology in the field of therapeutics. Among them appear the names of Jung, Liebault, Binet, Dubois, Forel and our own Muensterberg, Boris Sidis, Putnam, Gerrish, Prince, Taylor and others.

The basic principles of the dynamics of psychotherapeutics are contained in the four following propositions, viz.: 1. The power over the body is in the subconscious mind. 2. This power is operated through expectancy—an active faith. 3. Expectancy is developed and directed by suggestion. 4. Suggestion is best given to the patient while in passivity—relaxation—or, as Dr. Sidis terms it, "The hypnoidal state—a sub-waking condition."

It is perhaps no exaggeration to state that seventy-five per cent of the American people are neurasthenic. Before closing this brief paper the writer will give from his own practice the essentials he regards necessary to incorporate in a suggestive line of treatment for a nervous wreck or a neurasthenic. First, have patient in a calm, relaxation state, in a Morris chair or reclining on a couch; then, stationed by the side of the patient, give the suggestions in a soft, distinct monotone expressing as best you can an ideal expectancy in order to make as strong an impression as possible on the patient towards arousing the dormant, potential energies of the organism into strong, effective, physiologic lines of action, somewhat as follows: "You do not need any medicine to make you sleep or to quiet your

nerves; you will therefore gladly relinquish at once all sleeping potions and nerve sedatives without missing them in the least; your function of sleep and rest is to return to you rapidly in a natural, easy way; you are receiving right now the healing message of calm and repose; sleep is coming to you in full measure; you will retire tonight in this pleasing relaxation state; this will assure a nice repose, and you will arise in the morning refreshed and feeling much better; this improvement will be progressive; sleep will come better and better each following night, until soon you will be having established a habit of satisfying, normal sleep; you will rapidly drop all worry and peevish, irritable moods and in place of that languid, no-account feeling, there will come a spontaneous play of cheerful, buoyant thought, thrilling your whole body and inspiring your complete mentality with a delightful sense of restoring strength permeating every part of your being; your bodily senses will call for simple, wholesome food—just what you need—with a keen yet discriminating appetite; each succeeding day will bring a better state of the nerves, until every function of the body becomes restored and you will feel and sense your old-time health and nervous vigor." Of course the operator will direct suggestion, in detail as needed, to meet the special abnormalities of the case in hand.

The following case is that of a drug habituate, a cigarette fiend, John P—. He was given five hypnoidal suggestive treatments extending over a period of nine days. The suggestions embodied the following: "You will never want to make or smoke another cigarette; but should you break over and attempt to do it, you will be made so deathly sick from it that you will never try to smoke again." He was cured but had this experience: Three days after the first treatment he smoked half of a cigarette, which made

him deathly sick. I have never heard that he tried it again.

Just one more case I will briefly report—that of an acute, infectious, initial attack of appendicitis—a Mrs. B.—, age 35, mother of two children. I saw her the second day, when I found the family arranging to have her taken to a hospital for an operation. From my examination I could come to no other conclusion than that she and her friends had guessed a correct diagnosis. The regional pain and tenderness, with slight swelling and some nausea and fever, were present. In a chiropractic way, I also interrogated the spinal nerves, and I found very pronounced tenderness of the first and second right lumbar spinal nerves where they were given off from the spine. I immediately decided that I would treat the case by the latest modern spondy-

lotherapy methods on the combined chiropractic "Palmer Recoil" treatment, and the vibration method to the spine in the upper lumbar region as advocated by Dr. Abrams of San Francisco. I gave four of these treatments in so many days, with each one followed immediately by a hypnoidal suggestive treatment. This was done to get all of the dormant psychic element to work, with the spinal stimulation to check any destructive metamorphosis which may have started in the walls of the appendix, and to get normal cell activities in the parts as rapidly as possible. The first treatment turned the tide and an exceedingly prompt recovery was obtained.

I could give equally good reports in other acute diseases, most agreeably surprising, yet nevertheless substantial and true.

REMINISCENCES OF A COUNTRY DOCTOR.

A. T. CUZNER, M.D.,
Gilmore, Fla.

During the year 1859, while engaged in making illustrations for Dr. J. H. Douglass' "American Medical Journal," in a conversation with the doctor at our place of business, I remarked: "I should like to study the art of medicine and practice it, instead of pursuing my present art." The doctor replied: "Mr. Cuzner, you had better remain a good artist, making a fairly good income, than become a doctor, the average income for the latter being but \$1,000 a year; besides you will have to spend a great deal of money and study hard, for a number of years." I replied, that "while learning the art of designing and engraving I became acquainted with Surgeon Vollum, U. S. Army, who was formerly an engraver, and was infected with the desire to learn the art of medicine, not so much for the money there was in it, as for

the desire of knowledge in this direction."

Through my connection with Dr. Douglass, I became acquainted with Dr. J. Marion Sims, Dr. Louis Sayre, Dr. Peaslee and others. These all aided me in satisfying my desire; especially Dr. Sims, whom I remember with love and gratitude.

I graduated at the College of Physicians and Surgeons, Columbia University, N. Y.; Class, 1864. From that time to the present day I have ever sought the truth, giving it the preference over self.

During the year 1885, while reading the "Medical World," published by my friend, Dr. Taylor (who believes much in common with myself in matters political), we noticed an announcement of a publication called "The Alkaloidal Clinic," published by Dr. W. C. Abbott.

Now I had given considerable study and thought to the subject of alkaloidal medication; I therefore concluded to subscribe for the "Clinic," and make a further study in my practice of this system of medication. I give below the conclusions I arrived at as a consequence of such study and practice.

First, I believed the active medicinal principles located in any organic substance (if possible to isolate the same), would be preferable to administer than the crude whole drug, or the tincture or extract of it. Now most of these active principles are alkaloids. Some of these crude drugs have more than one alkaloid, each separate one having a specific limited action of its own, and some of these actions are contradictory to the others; hence usually undesirable when so applied.

There are other active principles used in dosimetry that cannot be classed as alkaloids. These are resins, glucosides, acids, salts of various metals, and various substances which cannot be classed with the above, such as pepsin, diastase, iodoform, nitroglycerine (glonion), camphor monobromate, etc.

Now while these medicines cannot be classed with the alkaloids, the mode—especially the object of their administration—should be the same, namely: A specific and limited action should be sought for in the administration of any medicine, which can be repeated as often as may seem desirable so as to abort, or modify, the morbid processes going on in the patient's body. Several of these active principles can be administered at the same time—if the patient's condition calls for them (as long as one principle does not neutralize another). However, two or more of these active principles combined together, and to a certain extent modifying and improving the action of each, can be administered as one remedy, or medication. For example, we have the "H. M. C. Combination," for which we

find such an extensive range of usefulness in our practice. Here we have hyoscin modifying, yet increasing the anodyne and narcotic principle of morphine, while the cactine holds up the heart against the depressing action of both the hyoscine and morphine. We need but mention another combined remedy, viz: defervescent compound. There is another factor in favor of alkaloidal medication, viz: There are known quantities in the alkaloids as usually prescribed in granules or tablets.

Now when we administer the crude drugs, or their tinctures, or extracts, we have unknown quantities to deal with. An example in my own practice will not be amiss.

I was attending a fever case, when I happened to run out of a supply of aconitine granules. I sent to the city for the tincture of aconite. When I received it I administered it to my patient with negative result. As soon as I could obtain a supply of the granules from the Abbott Alkaloidal Co. all was well.

If the physician makes a correct diagnosis, he may depend on the granules maintaining the requisite medical treatment, and they are always to be depended upon for their special specific action.

Another thought: We need not wait to commence treatment until we have perfected a complete diagnosis. We can commence our medication by treating symptoms while we are working for a perfect diagnosis; thus much valuable time is saved and much suffering prevented. This may be called variant treatment, while that directed against the specific cause of the disease conditions may be considered as the dominant treatment.

The trend of the medical profession today is towards a free use of the alkaloids, even when the physician prescribes the galenical form of medication.

I have noticed, by observation and study, that more physicians are taking to the administration of the alkaloids

in the form of granules and tablets every day than formerly.

MEDICAL PROGRESS

Some New Aspects of Pituitary Disease.—Harvey Cushing is the leading authority upon the pituitary body and its derangements. His latest views upon the subject are outlined by the editor of the *Medical Record* about as follows: The posterior lobe probably furnishes an external secretion, which is discharged through the infundibular stalk into the cerebrospinal fluid. The anterior lobe is the internal secretory portion of the gland. Either hypo or hyper disturbances of the anterior and posterior lobe functions may be associated in the same individual, complicating the clinical picture considerably. Hyperactivity of the anterior lobe gives rise to skeletal overgrowth (acromegaly), possibly to hypertrichosis and certain cutaneous manifestations. Hypoactivity of this lobe causes preadolescent failure of development in the osseous system and secondary sexual characteristics (Froelich's type; dystrophia adiposogenitalis). Hyperactivity of the pars posterior leads to lowered nutrition, a decrease in carbohydrate tolerance, excessive perspiration, etc. Hypoactivity of this part results in adiposity, higher carbohydrate tolerance, subnormal temperature, somnolence, dry skin, polyuria and polydipsia. "Treatment of individual or combined syndromes as evidenced by pituitary disease, has so far been limited to administration of extracts of the gland and surgical interference. Both of these methods are in their infancy and have met with success only in a limited and selected number of cases."

The Treatment of Hemolytic Jaundice.—Summarizing the findings of French clinicians mainly, who have demonstrated that a relatively large proportion of cases of jaundice are due

to destruction of red corpuscles, the editor of the *New York Medical Journal* alludes to several forms of successful treatment directed toward the special cause. Quinin, for example, kills the malarial organism and so arrests hemolysis and the resulting jaundice. Specific treatment (with mercury or dioxydiamdoarsenobenzol) causes syphilitic jaundice to disappear and rapidly restores the blood count to normal. Purgation and arsenic are quasi specifics for the jaundice of pernicious anemia when this depends upon auto-intoxication of intestinal origin. Thymol cures entozoal hemolytic jaundice by eliminating the hookworm, bothrioccephalus and other intestinal parasites. Both arsenic and calcium chlorid are thought to prevent the destruction of red corpuscles by increasing their resistance to the action of the hemolytic agent. The latter remedy has shown its value in nephritis with marked hemolysis (15 grains 4 times a day), and in the prevention of the hemolysis caused by chloroform, ether and other anesthetics. Cholesterin is also a powerful antihemolytic agent and has given excellent results in the hemolytic jaundice of pernicious anemia and chlorosis, severe cyclic albuminuria and paroxysmal hemoglobinuria with intense destruction of the erythrocytes. The best results have been obtained by means of intramuscular injections of a 10 per cent solution of cholesterin in decinormal saline solution.

Therapeutic Possibilities of Manual Adjustment.—This is the title of a thought-inspiring paper by R. Kendrick Smith, orthopedic surgeon at the Boston Polyclinic, appearing in the *New York Medical Journal* of March 22nd. He says that "Structure pre-

cedes function" is the motto of those diagnosticians whose philosophy includes a mechanical pathology, and quotes Cabot as writing ("Case Histories in Medicine"), when referring to an angina pectoris, "A masseur or an osteopath sometimes cures or greatly relieves patients whom regular practitioners have failed to help. We are much in need of further light in this direction." Dr. Smith reminds us that "At the last session of the American Medical Association no subject received more lively attention and caused more earnest discussion than the question of the absolute necessity of establishing a department of physical therapeutics in medical schools." Dr. Rogers, in a clinic last summer at the Massachusetts General Hospital, declared that he had never found a single case of primary sciatica, every case being secondary to sacroiliac strain. As to the therapeutic possibilities of manual adjustment, Dr. Smith relates an instance of very severe "renal colic" (wrong diagnosis, of course) attended by a dozen members of the staff of a great Boston hospital, where surgical intervention was the unanimous advice—cured instantly by manual adjustment of the ninth dorsal vertebra, which was palpably out of its normal position. Another instance was that of a woman who had undergone a successful abdominal operation two years before, but complete loss of memory had persisted ever since. "A week ago this case was examined from the mechanical standpoint, disclosing the fact that upper cervical mobility was markedly limited in every direction. In the two upper cervical articulations there were adhesions and specific subluxations. Radical reduction was successful, adhesions easily were broken down, and mobility was restored in one operation. It was my pleasure to see this case two days ago and to receive the report that memory is returning rapidly."

The Nervous Phenomena of Prostatic Disease. To the purely local symptoms, says F. X. Dercum (*Therapeutic Gazette*, February 15), may be added the following referred pains and sensations: Pain in the upper sacral and lumbar region, spreading, it may be, up to the level of the shoulder blades; painful sensations referred to the groins or diffused over the iliac fossae; pain referred to the testes or to the spermatic cords; pain referred to the thighs; also sensations of pressure referred to the top of the head or diffused widely over the head; less frequently, actual headache or precordial distress. Patients with prostatic and deep urethral disease often complain of disturbed sleep and manifest a distinct disinclination for mental work. Sexual hypochondria, erethism and perversions are frequently a part of the clinical picture.

Treatment of Simple Catarrhal Jaundice.—Samuel E. Earp (Medical Council) places much reliance on sodium phosphate, and if this proves too mild a purgative he uses also the sulphates of magnesium and sodium. He has obtained the best results from the following acid combination: Tincture of nuxvomica, 4 drams; dilute nitromuriatic acid, $7\frac{1}{2}$ drams; tincture of cinchona compound to make 5 ounces. One teaspoonful of the mixture is given in half a tumblerful of water before meals.

For Pyorrhea Alveolaris.—Dr. Joseph Head of Philadelphia (March Rocky Mountain Druggist) emphasizes the value of sodium silicofluorid in saturated solution (0.61%) in water. "This may be held in the mouth for from two to five minutes, three times a day, by patients under treatment for pyorrhea. And while in some cases it does not retard the progress of tartar on the teeth, in many cases it most emphatically does, and as a supplement to scaling of the teeth its healing effect on the inflamed gums is so satisfactory as to be little less than marvelous."

FOREIGN JOURNALS

(Translated by Joseph Cuneo, M.D.)

MEETING OF THE PARIS SURGICAL SOCIETY, MARCH 12, 1913.

War Surgery.—Dr. Ferraton reported to the Society the observations of Dr. Dreyfus at Salonica while in the service of the Turkish army. He studied the wounds produced by the sword-bayonet and the knife of the Bulgarians, and especially the wounds produced by carbine bullets, explosive bullets, bullets of small caliber, lead ones and the pointed ones. As a rule, the lesions produced by the bullets of small caliber are not serious when they go straight through, but they become very dangerous when for some cause or other they divide or are flattened. To this effect Dr. Dreyfus says that Dr. Venin examined the body of a dead soldier that had been struck in both knees by the same bullet. When it struck the first knee it went straight until it reached the center and changed somewhat its course without any serious lesion, but when it struck the second knee the bone was literally splintered. In regard to cannon balls, when it comes to wounds produced by shrapnel, they are the most terrible ones, because in exploding the lead bullets which they contain, in striking an obstacle they assume the most various shapes.

Treatment: All observers agree on on the fact that the simplest treatment is the best, also that exploration and all incisions of the wound must be avoided. A tincture of iodine dressing and asepsis are, after all, the best. Prompt attention cannot be given to abdominal lesions. Abdominal wounds demonstrate the fact very plainly. In fact, if nothing is done, 50 per cent of the wounded get well; if they are operated most of them die. It is especially on the battlefield that we find that surgical work is so much different from the hospital routine.—(*Le Progrès Medical*, Paris, March 22, 1913).

The Treatment of Scarlet Fever With Nucleinate of Sodium.

By M. G. Moljakow.

Moljakow treated 90 cases of scarlet fever with nucleinate of sodium, injecting hypodermically 0.1 gm. form every year of the patient's age. The entire dose was dissolved in 30-50 cc. of water, never exceeding one gram. He obtained surprisingly brilliant results in patients taken to the hospital in the first stage of the disease—the second day of the malady. In these patients the disease was stopped at once. The temperature dropped in two or three days to normal, and with the disappearance of all symptoms. Seventy-one patients were taken to the hospital on the third to the sixth day of the disease, and in these cases the efficacy of the nucleinate of sodium could not be demonstrated, but a remarkable decrease of mortality was noticed, as there were only five deaths in seventy-one cases. The children treated six days after the appearance of the disease received no benefit from the remedy. As Moljakow obtained also successful results in other diseases caused by streptococci (erysipelas and polyarthrititis), he believes that there is some relation between the infectious diseases and the hyperleucocytosis, produced by the nucleinate of sodium. (*Russkji Wratsch*, Nomberg, 1912.)—*La Riforma Medica*, Naples, January 18, 1913.

Andrew Vesalins.

This year the city of Bruxelles will celebrate fittingly the fourth centennial of the birth of Andrew Vesalins, the anatomist.

Bassini Institute.

On January 12 there was inaugurated in the city of Milan, Italy, Bassini's Institute, established by this great surgeon solely for the benefit of the poor in that city and in the Lombardy provinces.—*La Riforma Medica*, Naples, February 1, 1913.

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THE LAND AND THE SEA.

To the dweller on plain and mountain the ocean has a special charm of novelty and mystery, of majesty and power. Ceaselessly restless, continually assailing its shores, and obeying only the mild and tender glances of the moon, long before and since the days of old Ulysses the sea has ever been calling to the inquiring and adventurous spirit of man to "plough the watery main" and seek fair lands and far.

Until quite recently geologists thought that land and sea had changed place many times, but at present it is held that the great beds of ocean occupy the same situations which they first had on the cooling crust of the earth, and that marine fossils and phos-

phate deposits dug from the rocks and now far inland were laid down in shallow bodies of salt water, since filled up with alluvial silt or shoved up by wrinkling in the shrinkage of the earth's crust.

The greatest depth of the ocean below sea level (Nero Deep in North Pacific, 31,600 feet; Nares Deep in North Atlantic, 28,000 feet) exceeds the height of the highest mountain above sea level (Mount Everest, 29,000 feet); and the general level of the bed of the great ocean basins is submerged about $2\frac{1}{2}$ geographic miles beneath the general level of the continents.

At high temperatures silicic acid has a greater affinity than carbonic acid has for bases, while at low temperatures the reverse is true. Hence it is

that through the mass action of the carbon dioxid of the atmosphere and of ground and water air, the bases are continuously being leached out of the submerged and emerged rocks of the continents as carbonates, while silica (quartz) is set free. The heavier minerals (average sp. gr., 3.1) are finally deposited in the abysmal regions, and the lighter refractory siliceous materials (sp. gr., 2.5) are shoved up onto the land. Sea water contains about every known element, and is constantly increasing in salinity.

Water has the greatest specific heat of any liquid or solid, and it is the want of moisture in the air, and of the accompanying capacity for heat, which makes dry inland regions, like our own, show such sudden changes in temperature and rapid weather variations. The daily fluctuations of temperature in the surface water of the open ocean far from land do not exceed 1° F. (the air above, 3° or 4°), while in the sandy regions of the Sahara and the California and Arizona desert the temperature ranges about 100° F. from 3 a. m. to 3 p. m. In Denver the maximum monthly temperature range is about 80° , whereas in San Diego the mean temperature of all the months varies only from 51° to 68° . Without the Gulf Stream and the accompanying aqueo-aerial currents, the mean temperature of London would be 17° in place of 39° .

The sun's rays penetrate water to approximately 600 feet, and down to this depth the whole surface of the ocean has been compared by Sir John Murray to a vast meadow. "Everywhere there are myriads of Diatoms, calcareous and other microscopic Algae with a red-brown color, the chlorophyll in which is ever busy under the influence of the sun's rays converting inorganic into organic compounds. These minute organisms are the original source of food for the vast majority of marine animals, both in the surface waters and on the floor of the ocean,

even at the greatest depths. The reserve food of these minute organisms is little globules of oil, instead of the granules of starch which prevail in terrestrial vegetation. This is doubtless the original source of the oil which appears in marine fishes, birds and mammals in such abundance."

The water on ocean's floor at great depths is nearly everywhere under 40° F., and a very large part of it, says Murray, is below freezing point. The animals of these depths are mud-eaters, subsisting upon dead organisms and excreta fallen from surface waters. It is probable that all stratified rocks, whether marine or lacustrine, have passed through the intestines of animals, and in many instances the excretions of benthonic animals are converted into glauconitic and phosphatic grains.

Nearly all oceanic animals are cold-blooded. In cold waters there are fewer species, but each consists of greater numbers. These marine animals take calcium sulphate from the sea water and convert it into limestone, or calcium carbonate, which is deposited in shells and skeletons from warm water as aragonite—from cold water, more slowly, as calcite. The extreme range of temperature in the surface waters of the ocean is from 28° to 95° F. Between the circumtropic (coral reef) and circumpolar zones, in which the high or the low temperature varies not exceeding 10° F., there are two intermediate zones with a wide range of temperature. Here warm currents occupy the surface at one season of the year, and cold currents at another season, with consequent great destruction of fishes and other marine life, causing the phosphatic and glauconitic deposits of past ages. Typical pelagic sediments are made up of the shells and skeletons of calcareous and siliceous organisms now living in the surface waters, and of inorganic material derived from submarine eruptions, including pumice and

volcanic dust. The deepest layer is a red or chocolate clay with iron and manganese nodules, cosmic spherules from meteorites, the carbonates of whales and sharks' teeth. Globigerina ooze forms at the rate of about one inch in ten years, but phosphatic and lime deposits accumulate more rapidly in certain areas.

The abysmal depths of ocean are in eternal darkness, except as feebly illuminated by the fitful gleams of phosphorescence. Says Murray: "Phosphorescent light plays a large part in the economy of marine organisms, and it is a remarkable fact that this phenomenon of phosphorescence has never been observed in any fresh-water organisms. Some deep-sea animals are blind, some have very large eyes, some have highly developed tentacular organs. Some have complicated organs for the emission of light, some are many times larger than their shallow-water allies, while others are much smaller.

All have a rather feeble development of calcareous shells and skeletons and a rather sombre color."

The popular but fallacious impression that fish is a particularly good brain food arose from a jesting remark made by the elder Agassiz once at a banquet. Fish and other sea foods are, nevertheless, the chief animal supply of nutriment of many millions of the world's inhabitants. Aside from the inexhaustible food supply, the potential wealth of the seas of this globe is incalculable. Take, for example, the kelp of the Pacific coast, now only a bar to navigation; yet it is rich in potassium and iodine and can be utilized in the manufacture of numberless articles of apparel and daily household use. Or consider the tremendous latent energy of the waves and tides, some time perhaps to be harnessed by the will of man and converted into heat, light, electricity and mechanical power.

PERSONALS

By the Editor and Associate Editors.

"Lives of great men all remind us
We can make our lives sublime,
And, departing, leave behind us,
Footprints on the sands of time."

The occasion for this quotation is the appearance in the June issue of that iconoclastic publication, *Jim Jam Jems* (for sale at most news stands), of what purports to be extracts from an affidavit by Margaret E. Simmons, wife number one of "Our Peerless Leader," and the person who knew him best of all. We commend the article to the careful perusal of our readers.

Dr. J. B. Reed of Boulder is building a new residence.

Dr. T. J. Carlin has been lying ill in St. Joseph's Hospital.

Dr. and Mrs. L. A. Miller of Colorado City are recreating in the South.

Dr. John L. Schwer of Pueblo is taking a post-graduate course in the East.

Dr. Samuel French of Meeker, Colo., visited Denver the last week of May.

Dr. J. J. Pattee and Dr. R. W. Corwin have been elected school directors in Pueblo.

Dr. Henry C. Watt of Colorado Springs is now visiting the old haunts in England.

Dr. and Mrs. Edgar F. Conant rejoice in the advent of a dainty little daughter.

We are pleased to note that Dr. John M. Foster is on the highway to recovery.

There are now about forty physicians and surgeons in the Majestic building.

Dr. Joseph C. Kamp of Casper, Wyo., spent a week lately visiting friends in Denver.

Dr. and Mrs. L. E. Lemen recently spent a few pleasant days with friends in Omaha.

Dr. J. A. Matlack of Longmont, Colo., spent several days in May visiting Denver clinics.

Dr. John I. McGonigle of Pueblo has been taking an extended trip through the Northwest.

Dr. Finley Ellingwood of Chicago lately spent a few weeks with his brother in Pueblo.

Dr. and Mrs. Madison J. Keeney have returned from California to their home in Pueblo.

Dr. Frank W. Acker of Idaho Springs was shaking hands with Denver friends last month.

Dr. Frank W. Kenney has returned from a delightful three months' journey in the Orient.

Dr. N. G. Alcock has returned with his bride to Pueblo from their bridal tour in the East.

Dr. George H. Lee, interne at the county hospital, took ill with scarlet fever two weeks ago.

Dr. and Mrs. Charles F. Shollenberger are at home after a very enjoyable trip to Panama.

The Denver Dental Association has decided to discontinue free clinics in the public schools.

Dr. J. J. Pattee and family of Pueblo have started on a motor trip to Chicago and the Lake Region.

The many friends of Dr. George F. Libby are pleased to see him doing well after his gastroenterostomy.

Dr. Leonard Freeman attended the recent sessions of the American Surgical Association in Baltimore.

Dr. Herman Trossbach of Colorado Springs was married in Jersey City, May 3, to Miss Minnie W. Augustin.

Dr. Alexander Craig and Miss Helen Davidson were united in holy matrimony at noon, June 4, 1913.

Dr. T. A. Stoddard read a paper, the fourth week in May, before the Arizona State Medical Society at Globe.

Dr. W. E. Buck and family of Pueblo are making a six weeks motor car tour of Kansas and Nebraska.

Dr. E. K. Shelton of Antonito has recovered from an operation for appendicitis, done the last of April.

Dr. W. J. Fairfield will leave Denver about the first of June for a trip to New York City and the Adirondacks.

Nine inmates of the State Home for Dependent Children died last month from an epidemic of scarlet fever.

The average number of patients in the Denver County Hospital during the first quarter of this year was 468.

Dr. Fritz Lassen of Pueblo has resumed his practice at 124 Central block, since the burning of the Swift building.

Dr. and Mrs. Thomas H. Hawkins have returned to their old home in Denver after a prolonged sojourn in Europe.

Dr. J. A. Lawson has returned to Rocky Ford from a fortnight's visit with friends and relatives at Winterset, Ia.

Dr. E. A. Allen of Pueblo was called to Yellow Springs, O., recently on account of the illness and death of his mother.

Dr. and Mrs. C. W. Russell have removed from Lamar to Springfield, Mo. Dr. N. M. Burnett succeeds to Dr. Russell's practice.

Dr. S. Ringolsky is now practicing in San Francisco, limiting his work to diabetes and diseases of the stomach and intestines.

Dr. E. W. Foster, recently of Warren, Wyo., committed suicide in Omaha, May 11, by injecting some unknown substance into a vein.

Mr. Oliver W. Hall of Fort Collins, son of Dr. J. N. Hall, has been elected to an associate membership in the Society of Automobile Engineers.

The music loving contingent of the Denver doctors turned out in large numbers at

the recent concert of Ysaye, the celebrated Belgian violinist.

Dr. Stuver's friends are now saluting him as "grandpa," the occasion being the birth of a fine little son to Mrs. R. L. Parshall, Dr. Stuver's daughter.

In the sudden and unexpected death of Mr. Willis V. Elliott the medical profession of this city has lost a true-hearted friend and a splendid citizen.

Dr. Robert M. Marshall anticipates leaving Denver about the first of June. He will be away several months, part of the time on his ranch in New Mexico.

The annual meeting of the American Institute of Homeopathy is billed for Denver, beginning July 6. About 600 physicians are expected in attendance.

Dr. and Mrs. H. G. Wetherill are off for a six months' sojourn in the British Isles, and particularly for motor rides to all the beautiful spots in the kingdom.

The Denver branch of the A. Ph. A. has started a circulating library, with headquarters in the store of Mr. W. A. Hover, who is one of the chief benefactors.

Dr. H. O. White of Los Angeles, Cal., professor of anatomy at the medical college there, spent a few days in Denver recently while on his way to Europe.

Dr. Chas. A. Powers has been elected a member of the executive committee of the National Cancer Association recently organized in New York City.

Dr. Leonard W. Ely has been honored by being chosen vice president of the American Orthopedic Association, which met a few weeks ago in Washington, D. C.

The numerous medical friends of Mr. Wm. Jones, the instrument maker, will be grieved to learn of the unexpected death, last month, of his estimable wife.

The medical profession of Denver has been honored by the election to the mayor's chair of Dr. J. M. Perkins, who received the votes of all the other commissioners.

Now that the political lottery is over, for about 18 months, let us all join hands and help to bring into their own the finest city and the greatest state in the Union.

Dr. C. Edith Maxwell, formerly of Denver and St. Joseph, is now located at Rockland Idaho. In renewing her subscription she says: "I certainly enjoy your Journal."

Out of twenty-seven candidates (including six physicians) for commissioner of social welfare, Dr. James M. Perkins had the good fortune to win out at the head. Congratulations!

Drs. Wm. H. Crisp, George F. Libby and Daniel G. Monaghan have received the degree of doctor of ophthalmology from the medical department of the state university.

Dr. R. W. Corwin has returned from an extended visit to eastern cities. He delivered a lecture at the New York University upon "Welfare and Surgery in Hospital and Camp."

Dr. Edward Jackson attended the meeting

of the American Ophthalmological Society held in Washington, D. C., early in May. Dr. Jackson was president of this association last year.

Dr. and Mrs. F. A. Burton have returned from a vacation of several months in California. The doctor is more than ever convinced of the allrightness of Denver and Colorado.

Dr. Theo. H. Reiss is now located as to his residence at 917 Acoma street, his office being at 1040 West Colfax avenue, where the latchstring is always out to his many friends.

According to the new Colorado cocaine law, dentists and veterinary surgeons are not allowed to prescribe the drug, and physicians cannot prescribe more than 30 grains for a patient.

Judging from the number of fatal poisonings recently in husbands who have taken bichlorid of mercury by mistake for headache tablets, neomalthusianism is not altogether a theory.

Dr. L. P. Barbour, city health officer of Rocky Ford, had an instructive and inspiring paper entitled "Suggestions for the Prevention of Typhoid" in a recent issue of the Rocky Ford Tribune.

Dr. and Mrs. C. F. Taylor of Pueblo attended the commencement exercises in Boulder last month, in order to be present at the graduation of their son Roy from the medical department.

Dr. Robert Colttman of Tientsin, China, former physician to Li Hung Chang and author of a book on the Boer war, has recently been visiting friends and relatives in La Junta and Denver.

The class of 1913 of the Children's Hospital Training School for Nurses, held its graduating exercises on the evening of May 28th at El Jebel Temple, six pretty nurses receiving their degree.

At the annual election of the Twentieth Century Club, on the evening of May 28th, Dr. Grant S. Peck was chosen president; Dr. A. G. Case, vice-president; and Dr. Carl G. Parsons, secretary-treasurer.

Dr. P. J. McHugh has been honored by being chosen president of the Fort Collins good roads organization. According to the Weekly Courier, Dr. McHugh is Fort Collins' "leading worker in all movements."

In order to secure more space for his work, Dr. F. A. Burton will remove, June 1st, from the Metropolitan to the Majestic building, where he has engaged four rooms on the Broadway side of the structure.

At the May meeting of the Denver Medical Club, the long-time genial host, Dr. L. T. Durbin, was presented with a handsome chair as a tribute of the grateful esteem in which he is held by every member of this society.

Dr. Hall attended the recent Congress of Physicians and Surgeons at Washington, D. C., and on his return he gave an address upon "The Complications of Gastric Ulcer,"

by invitation, before the Academy of Medicine of Buffalo, New York.

The Medico-Legal Society of New York celebrated the closing of the third decade since the founding of the Medico-Legal Journal with a jubilee program given at the Waldorf-Astoria on the evening of May 21st, Dr. T. D. Crothers presiding, the Hon. Clark Bell serving as secretary.

At the May meeting of the Denver Clinical and Pathological Society, Drs. Levy, Arnell and Black reported cases showing the diagnostic value as to lues of bilateral swelling of the nasal septum, particularly when accompanied by nodules.

At a recent meeting of the Woman's Professional Club, Dr. Lillian Pollock was elected president; Dr. M. Ethel Fraser, vice-president; Dr. Mary Sperry, treasurer; Dr. Mary Parks, secretary; Miss Gail Laughlin, executive member.

Now that Dr. Friedrich Franz Friedmann has got what he came after, namely, the coin, and has returned to Germany, we may hope that our official medical journals will waste less space upon a matter which, on the face of it, had no scientific foundation.

On the evening of May 14, at a meeting held in the medical meeting room of the Metropolitan Building, about 100 physicians assembled and established the Denver Society of Medical Economics—an association designed to aid its members in procuring the very necessary wherewithal.

Dr. Flavel B. Tiffany has returned to his practice in Kansas City after making a tour of the world, visiting the eye and ear clinics of the principal hospitals and colleges. While in India he made a special study of the celebrated Indian operation for cataract, with the originator, Col. Smith of Bombay.

By a vote of 380 to 30 the Denver County Medical Society, at a special meeting held on the evening of May 6, expressed the sentiment of the medical men of this city as unmistakably opposed to the extraordinary demand of the medical department of the state university for control of our health department.

The popular misconception in regard to the pecuniary rewards in the practice of medicine is well shown in the case of the late lamented Dr. Arnold Stedman, a skillful physician, a man of irreproachable habits, conservative methods and untiring industry, working steadily up to the age of 74, and in the end leaving an estate whose net value is only \$19,000.

Dr. E. Stuver of Fort Collins had a narrow escape on April 16th. In trying to avoid running into a team which was occupying a large part of his side of the road, his automobile ran down over the side of a bank four or five feet high, turned turtle and caught him under it. Fortunately he sustained no serious injuries and kept right on with his work.

Dr. W. W. King of Cripple Creek read an interesting paper upon "Pneumonia in High

Altitudes" at the annual banquet of the Pueblo County Medical Society, May 6.

Dr. Robert W. King, who has already become one of the leading physicians on the North Side, has rented the building at the corner of Pecos and 35th avenue, to use as an office and private hospital.

The Colorado College of Dental Surgery graduates 33 D. D. S's this year, the total enrollment being 120 students, the largest in the history of this progressive institution. The annual banquet, held at the Brown Palace Hotel on the evening of May 29th, was the usual elaborate and enjoyable affair. Dr. J. F. Morning made a witty and inspiring toastmaster.

That the American spirit of independence is not totally extinct in the medical profession, is shown by the fact that following Dr. Lydston's expose of "A Privileged Medical Class" (see our May issue), the Chicago Medical Society recommended to the Illinois State Board of Health and the State Legislature that the clause favoring government medical officers be expunged from the medical practice act of Illinois.

The fifteenth annual meeting of the American Proctologic Society will be held in Minneapolis, June 16-17, 1913, at the Hotel Radisson. The profession is cordially invited to attend all sessions. Dr. Louis J. Hirschman is president of the association; Dr. Lewis H. Adler, Jr., secretary-treasurer. The last paper in the program, on "Ulcerations of the Rectum and their Treatment," is by Dr. Horace Heath of Denver.

Dr. E. Stuver has been invited to deliver his lecture on "The Influence of Stimulants and Narcotics on the Health and Development of the Human Body," in two churches in Minneapolis on June 15th next. This is one of a number of lectures which are given to the public under the auspices of the American Medical Association at its annual meetings. Dr. Stuver delivered his lecture three times at the Los Angeles meeting two years ago—twice in churches and once before the Federation Club. It was favorably received and commented on and published in full.

By a vote of nearly three to one, Denver voters decided to retain control of their own health department, rather than to turn it over to a small coterie of medical men (however eminent and disinterested) with headquarters at Boulder. Not a few, indeed, of the members of the faculty were opposed to the amendment so cunningly headed, "For a Scientific, Efficient Department of Health." Had not the physicians of the city, led by Drs. Aubrey Williams, C. E. Cooper and F. R. Coffman, risen in righteous indignation and instructed the people as to the real meaning of the amendment, it would pretty certainly have carried on its title alone.

Many medical men attended the evening meeting of the Denver Chamber of Commerce, May 16th, drawn thither by their rest in the amendment designed to give

our local health affairs into the control of the state university. Specious arguments in favor of the amendment were made by Editor Elder, City Attorney-Regent Bryant and that valiant "citizen of Boulder," Herbert George. The plain facts in the case were stated by Dr. Sherman Williams, Col. James H. Brown, Dr. Grant S. Peck and particularly Dr. Claude E. Cooper, who made the most convincing speech of the occasion. By a vote of about two to one the Chamber voted in favor of home rule and against the amendment.

In medical society work, as in other lines of endeavor, Denver physicians are well up in the front rank. Referring, for example, to the program of the next meeting of the American Medical Association, to be held in Minneapolis, June 17-19, we note that the first paper in the section on the practice of medicine is upon "Chronic Arthritis," by Dr. Leonard W. Ely, who will also read a paper on "Injections in Treatment of Joint Tuberculosis," before the section on orthopedic surgery. Dr. Leonard Freeman will discuss "The External Bone Clamp Versus the Internal Bone Plate in Fractures of Long Bones." Dr. Robert Levy will preside over the section on laryngology, otology and rhinology, and deliver an address upon "The Dignity of Otolaryngology." Dr. F. P. Gengenbach will report a case of "Precocious Menstruation" before the section on diseases of children. Dr. Howell T. Pershing will serve as chairman, and Dr. Geo. A. Moleen as secretary of the section on nervous and mental diseases. Dr. Pershing's address is entitled "Neurasthenia, An Increased Susceptibility to Emotion." Dr. A. J. Markley will contribute a paper upon "Primary Sarcoma of the Lower Lip." Drs. S. B. Childs and W. M. Spitzer will present before the section on genitourinary diseases "A Study of the Normal Kidney, Its Pelvis and Ureter, with Stereopticon Views." Dr. O. S. Fowler will present a paper upon "Experimental Kidney Surgery," and Dr. Oliver Lyons one upon "Primary Tuberculosis of the Genital Organs in Children."

A cobbler had a sign on his door reading:

.....
: CLOSED ON ACT. :
: SICKES IN FAMILY. :
:
:

"Did you write that card yourself?" asked a customer.

"I no write," the cobbler answered. "I got a friend is a barber across the street; he been to college."

A young man had taken his wife to a show; and as there was no one to look after the baby, they had brought it along. It cried lustily all through the first act. At the close of the act an usher came down the aisle and informed them that if they could not keep the baby quiet they would

have to go to the box office, get their money, and go out.

They succeeded in squelching the baby, and all went well for a time.

Then, five minutes after the last act had commenced, the young father leaned

over and said: "How do you like the show?"

"Rotten," was the reply.

He was silent for a moment, and then, leaning over again, he whispered:

"Stick a pin in the baby!"

BOOKS

Tuberculin in Diagnosis and Treatment.—By Francis Marion Pottenger, A. M., M. D., LL. D., Medical Director of the Pottenger Sanatorium for Diseases of the Lungs and Throat, Monrovia, California. 243 pages, royal octavo, 35 illustrations, including one colored plate. Price \$3.00. C. V. Mosby Company, St. Louis.

This volume is the most complete and up-to-date work on tuberculin that has yet appeared. Beginning with the importance of tuberculin tests in the early diagnosis of tuberculosis, the author discusses in detail "Subcutaneous Tuberculin Test," "Cutaneous Tuberculin Test," "Tuberculin in Treatment of Tuberculosis," "Hypersensitiveness," "Certain Conditions Which Have Made the Adoption of Tuberculin as a Diagnostic and Therapeutic Measure Difficult," "Evidences of the Therapeutic Value of Tuberculin," "Fever in the Relationship to Tuberculosis," "Temperature Curve in Tuberculosis," "Technic of Administering Tuberculin," and an Appendix, in which is given for the first time in English Koch's announcement of the discovery of tuberculin.

Dr. Pottenger is qualified to speak on this subject. Two thousand cases of tuberculosis coming under his personal care in sanatorium practice furnishes the basis for this work. Careful, painstaking effort is everywhere noticeable in this production. The chapters on importance of the Tuberculin Test in the Early Diagnosis of Tuberculosis is especially to be commended, as well as that on Technique of Administering Tuberculin.

There is no doubt but that many failures attending the use of tuberculin in the past have been due to a lack of knowledge of its proper administering. This defect can be overcome by a careful perusal of this volume and to follow its technique.

A Text-Book of Physiology.—Fourth Edition, revised, by Isaac Ott, A. M., M. D., Professor of Physiology in the Medico-Chirurgical College of Philadelphia; Ex-Fellow in Biology, Johns Hopkins University; Consulting Neurologist, Norristown, Penna.; Ex-President of American Neurological Association, etc. F. A. Davis Company, Publishers, Philadelphia. Price \$3.50 net.

The value and popularity of this work is proven by the fact that the first edition was published in 1904, and that from that date three large editions and reprints have been

issued. The book consists of 911 pages, with 394 beautiful illustrations from the cell to foetal circulation. The work is of such a character as renders it admirably adapted to the needs of the physician and surgeon. The plates showing the movements of the stomach and intestines in man by the Roentgen Kinematograph are the latest observations of the Munich school, and it is the first time that these cuts make their appearance in any English text-book of physiology. The author has rewritten, to a large extent, the chapter on Internal Secretions. The pineal gland and gonads have been considered, and the relation of the ductless glands is minutely explained according to the latest experiments on this subject. Doctor Ott gives one of the best descriptions of the string galvanometer up to date, as well as the electrocardiograms of the normal heart, and of the heart in Stokes-Adams' disease. We find that he has also indicated the centers of localization of motion in the cerebellar cortex, and that he has explained the new and important test of Abderhalden for pregnancy. In this work he has also incorporated the latest researches from the Medico-Chirurgical Laboratory upon the exciting, inhibiting, and synergistic hormones of the milk secretion, and has recognized the latest facts in physiology. The book is in plain, terse English, the style is easy and all unnecessary verbiage has been eliminated. It is a valuable textbook and should be in the hands of every practitioner. J. C.

Nervous and Mental Diseases. For Students and Practitioners.—By Charles S. Potts, M. D., Professor of Neurology in the Medico-Chirurgical College of Philadelphia. New (third) edition, enlarged and thoroughly revised. In one 12mo volume of 610 pages, with 141 engravings and 6 full-page plates. Price, cloth, \$2.75 net. Lea & Febiger, Publishers, Philadelphia and New York, 1913.

A book that goes into the subject in a clear and concise manner, the very latest, in recent advances in nervous and mental diseases, written in a way that it will be of much value to the general practitioner and student. Chapter 3, on Symptomatology and Methods of Examination, will, if applied, assist in clearing up diagnosis in complex cases. Careful study of the book will cause a physician to note distinctive symptoms, and make him a more discriminating diagnostician. F. A. G.

Epidemic Cerebrospinal Meningitis.—By Abraham Sophian, M. D., formerly with New York Research Laboratory. Octavo; 272 pages; 23 illustrations. Price, \$3.00. St. Louis: C. V. Mosby Company. 1913.

As the only work in the English language on this important disease, Dr. Sophian's book should find a ready market, particularly when its intrinsic value is taken into consideration. Every feature of the etiology, symptomatology, clinical and laboratory diagnosis, complications and treatment of this form of meningitis are thoroughly elucidated. Studies on blood pressure in meningitis, is the title of an interesting chapter upon a subject of great practical importance in the treatment of the disease. As to the Flexner serum, there can be no doubt of its value as a specific remedy in this malady, although the average mortality of cases treated with the serum still ranges, with different observers, from 13 to 49 per cent.

E. C. H.

W. B. Saunders Company of Philadelphia and London, have issued another edition (17th) of their handsome illustrated catalogue. In going through this edition we find it describes nine new books and ten new editions, not described in the previous issue. These new books are of great interest to the medical man, because they treat of subjects being daily discussed in medical circles. Any physician can get a copy of the Saunders' catalogue by dropping a line to those publishers. A copy should have a place on the desk of every physician, because it is most valuable as a reference work of modern medical literature. Send to Saunders today for a copy.

Why the American Medical Association is Going Backward.—(A Critique of the Medical Trust). By G. Frank Lydston, M. D., Chicago, professor of genitourinary surgery

and syphilology, medical department, State University of Illinois; member of the American Medical Association. Price, ten cents. The Riverton Press, 626 South Clark Street, Chicago.

In this 48-page pamphlet Dr. Lydston tells a great many facts which every doctor who is not a victim of lost manhood (speaking metaphorically) should know. He shows why, taking the figures given by the president of the A. M. A. last year at Atlantic City, there was good reason for the great falling off in membership (7,635) during the previous year, in spite of the \$6,000 per annum "official organizer," the alleged 50 per cent commission to agent drummers, and repeated "personal" letters of solicitation from the great and only G. H. S. himself. The brochure is written in Dr. Lydston's best style, and there is not a dull page in it.

Reference Handbook of The Medical Sciences.—Wm. Wood & Co., New York.

The first of the eight volumes of this work has appeared, and is a pleasant promise of what is to follow. The second edition of The Reference Handbook was published in 1904, so that the time would seem ripe for the edition. This one is being printed from new plates, and all the subject matter has undergone thorough revision. The first volume is printed on good paper, the type is not fatiguing, and the illustrations are very numerous. Special mention should be made of the colored illustrations.

The reviewer has not read the entire volume of 928 large pages, as he is not quite through with the last edition of the Encyclopedia Britannica. The subjects, or most of the important ones, and those which consider recent progress, are handled much more comprehensively than might be expected in a work of the encyclopedia type.

G. H. S.

MISCELLANY

Lilly's Liquid Soap.—A thoroughly efficient Liquid Soap is invaluable to the physician and surgeon. It has the advantage of being readily mixible with water, absolutely clean and conveniently carried in the physician's case. The soap that is available in the house to which the physician is called, may not be desirable in fact, it may be objectionable. Liquid soap can be quickly and thoroughly applied to the parts to be washed. It must be a detergent, non-irritating and sufficiently liquid to be promptly delivered from the container.

When the physician becomes accustomed to Liquid Soap he finds that he relies upon it much as he does upon certain drugs with which he is familiar. Eli Lilly & Company now offer a Liquid Soap made of pure vegetable oil, clear, unscented and possessing all the properties of an ideal soap. It contains no foreign germicidal agents, yet is antiseptic.

The container is unique and its constrictor form obviates slipping from wet hands. It will occupy but little space in the surgical bag and a special plunger stopper fulfills a double purpose in preventing leakage and clogging of the orifice. Supplied by the drug trade in 10 ounce bottles and one gallon containers.

Pollantin.—Fritzsche Brothers now present Pollantin, Dunbar's antitoxic serum in hay fever, also in ointment form.

This adjunct to the older, powder and liquid forms, we learn, was added at the solicitation from many physicians, that is to provide a form which would specially adapt itself to the treatment of hypersensitive cases, instances in which the use of the older form apparently acted as an irritant.

(Continued on page 609.)

Utah Medical Journal

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A TRAGEDY OF WOMANHOOD.

DR. G. HENRI BOGART,
Paris, Ill.

One who will consult the report of the Chicago Vice Commission, will find the account of how a den of prostitution in that city was taken in such way that the proprietor was tried in the courts, and the case was taken up to the supreme tribunal of the state.

Among the evidence which thus became part of the state records was a complete set of books, day book, and monthly ledger accounts with the inmates, running for 22 months.

I refer to this to bear me out in the statement that the barter in the soul and body of woman is a mere matter of business, and big business at that, since the 18 girls who constituted the force of the establishment noted took in almost \$180,000, and this was only a "dollar house" at that.

It is an established principle of business that supply and demand are equal.

Create a demand for any thing and the genius of modern commercialism will fill it.

It will be observed that the record of the shame of the inmates of this place will furnish a complete index of all the big meetings, such as conventions, held in the city, during the period mentioned by the increased volume of "business" chronicled at the period.

It is a lamentable fact that the normal avenues for recruiting the women for this field are not adequate for the growing demand.

The women who enter on a life of shame for animal pleasure, or for laziness, or through the starvation wages paid their sex by employers, do not suffice to supply the demand, and the question of white slavery has reared its hideous head so high as to become of national importance, so much so that in the wake of the recent devastation of part of the country by flood and tornado, the white slaver was found following in the wake of the storm, offering to give employment to destitute girls, and to send them to addresses in

distant cities, only to entrap them at the destination.

With all our evil commercial conditions, in the line of woman's labor, the normal supply cannot fill the demand, and it is this insistent demand that is responsible for the extent of the prostitution in America, and the larger portion of this demand is made by men who are of the recognized respectable classes.

It is a horrible thought, but the real responsibility for the traffic lies with the very men whose voices are raised in protests against the evil, which they clandestinely support.

A letter has just come to my desk which brings this matter so forcibly to my mind that I feel it my duty to sound a warning.

A woman has written me, telling of conditions which I know are true. Through business complications, this woman and her husband have the residue of their property tied up so that it is absolutely unavailable, even their household goods being in storage. They went to a large city, and he has been practically unemployed all the past winter. The woman is remarkably sprightly, vivacious, highly intellectual and well educated.

She secured a position as saleswoman in a large department store to make the money necessary for their joint support, which does not admit of her using the ordinary wifely methods of saving since they are forced to rent furnished rooms, and eat in restaurants, and it has been a severe struggle for her.

Because she clings to her husband, her people, who are well to do, will not assist her, and I learn that she has been forced to pawn her jewelry, her wedding ring even being pledged.

At one time in the past, it was my fortune to have discussed the extent of the social conditions with some ladies when this woman was one of those in the audience, and she refused to accept my deductions as to the hidden horrors

of the conditions, she insisting that my investigations and studies along the lines of vice had distorted my ideas.

The place in which she is employed is a department store which employs something like 2,400 women and is considered one of the most magnanimous in its treatment of its employees of any in the country.

There is a rest room, with a matron and medical help in the building, there is an elegant restaurant, in which meals are served practically at cost. The building is equipped with all of the beauty that can be given to a commercial structure, and there is an air of quiet elegance about it that immediately strikes the beholder the moment he enters its portals. The owner is noted as a broadminded philanthropist and the class of employees is considered far above the average.

She writes: "Doctor, I must offer you a tardy apology for the strictures I once placed upon your generalizations; you did not tell a beginning of the horrible truth.

I am at home today, too ill to go to the store, and there is no one to whom I may come with my trouble, only you, for were I to tell my husband, I dare not think of what would follow.

I am sick, soul, heart and mind today, with an awful burden that now shows me no end. When I came to work in this place, I felt that I was in the company of ladies and gentlemen, and I tried to make them all my friends, to laugh and so lighten the burden of the unaccustomed work.

Near Christmas I was heart sore that I could not afford the usual gifts, and when I spoke of the smallness of the wages, and of my disappointment to one of the girls she asked me 'Haven't you a friend?' I answered, 'Yes, my husband,' and she laughed at me. I understood, my God, yes. The scales fell from my eyes. The buyer, on this floor had made a habit of stopping and talking, and I had tried to make my-

self agreeable, though I was often compelled to refuse to go out and dine or take lunch with him, not that I suspected any thing wrong, but through womanly reserve.

Then, one evening, I was late with a customer, when closing time came and when I went to the cloak room for my wraps, the lights went out, and I grasped my garments and rushed for the elevator.

The man met me in the dark passage, and tried to engage me in conversation but I brushed past him. A few evenings later, the same thing occurred and as I tried to pass him, he caught me by the arm and told me not to be in such a hurry, but I tore loose and again made my way to the elevator.

The next morning I made bitter complaint to the superintendent with the only result that I was transferred to the first floor.

Here the troubles are worse. I had been on this floor but a couple of days, when there was a bargain sale on dress patterns, and as I was sorely in need of a new gown, I went to the floor manager and asked that a dress pattern be laid aside for me until Saturday night, when he took a ten dollar note from his pocket and offered it to me saying 'Girlie, you do not need wait until Saturday night.' I asked him if there were many of his family in the insane asylum and went back to my table, nor did I get the gown. There is one old man with silvery hair whom I had considered nice, he seemed so different from the rest, until one day when I met him in a crowded aisle, he slipped his arm around my waist and lifted me clear of the floor, so that I almost made a scene in breaking loose, and a short while after he came to my table when there was no customer about and said: 'My God, I'd give any thing if you would allow me to demonstrate my love for you.' I rebuked him, and defied him to discharge me, and he walked away, but now every day I see him watching

me as a cat watches a mouse. You may say 'Why don't you quit?' I have no place else to work, and when there is a slack week, and the commissions are small, I eat a sandwich with a cup of tea for breakfast and for luncheon repeat the scanty meal, some of the days when I have refused to go out with some of these men, and if I were to stop work there would be nothing.

There is a handsome floorwalker on this floor, who is called 'The Sweet Singer' by the girls; he has a fine voice and sings in some show evenings, and he is always singing bits of love songs as he passes when business is slack, and recently he handed me a note which when I opened read 'My love for you is as a flaming sword, and your love for me would prove an armor against the world.' I am getting hardened, and I called him back and asked him what under heaven he meant. He thought that he had made a conquest, he must have thought so, for he said, 'Just because it is you with your charming personality'—when I stopped him and left the store for the rest of the day, and now when he passes my table he hums *Il Trovatore*, and looks at me as though he wanted to carry me off, as he doubtless does.

There is one elderly man who is a countryman of mine, whom I have known for three months now, and who has always treated me with respect and I have felt free to talk with him.

Yesterday I was feeling ill and at five o'clock I obtained permission to go home, and when I came down from the cloak room he was waiting for me at the entrance and asked that he might walk home with me. I had counted him as the one manly exception in all that bunch of brutes and was grateful, for I felt dreadfully.

When we arrived at the rooms I invited him to come in and wait until my husband should return and make his acquaintance.

We had barely reached the room, un-

til it was the same horrible story over and he commenced to declare his love for me, and though I ordered him to leave, he stayed until my husband came in and I after introduction could escape humiliated and hurt to the soul and yet I must bear it. Then there are the grosser insults from these and from some of the others, there are the squeezings against my person in the elevators as we 'just working girls,' and man brutes are crowded into the packed cages as we go to and from the cloak-rooms on an upper floor.

I am almost exhausted, not so much with being on my feet the long hours, as by the conflict of my woman's will with the hypnotic watchfulness of the hyenas who smile upon me.

Why, in God's name will they not leave me alone, and seek those who are not unwilling, for unbelievable as it may sound to you, there are women on our floor who are jealous of these horrible, hateful attentions that are forced upon me. Tell me what can I do?

To add to my trouble, yesterday, I had word that the town where my household goods are stored has been inundated by the flood, and I am wondering whether my treasures, my beautiful books and picture the best of my wardrobe and all the little things that a woman has gathered to cherish, may not be in soak as well as in storage.

I have tried to find another place where I may work, and have not been successful. What shall I do?"

Such is a part of a letter that has come to me as a blow, not a surprise, but as an unexpected shock.

Woman is far too generally considered as a legitimate prey, and her conquest as the greatest of sport, for many men who rank as highly respectable. Were this woman in her proper sphere, the devils who are hounding her would not dare to raise their unholy eyes to her. That she is superior in intelligence and virtue but adds zest to the game for her pursuers. The huntsmen

who are wild for the sport of chasing the wily fox would scorn to disturb poor pussy as she sits sunning herself on the garden wall, and the men who are addicted to this sport—God save the term—hunt in packs as do the dogs that follow the fox, or as a better comparison, the hyenas that prowl about the cypress clad cemetery that they may devour corpses.

It is an almost certain conclusion that there are numerous wagers among this hellish fraternity as to which shall be the one to force her to surrender, and it is a three to one shot, that there is now arranged a champagne supper for the one who shall prove the victor, and run the quarry to earth, though I have confidence that in this particular case the woman will win.

At such a supper the victor when flushed with the wine would as the stellar entertainment of the orgy, tell with all its hideous detail of the final surrender, whether that came with despairing shrinking, or whether the tortured victim had, when she relaxed her hold on the leash, been carried madly to the opposite extreme of desperate abandonment, but in either case the celebration would find its chiefest entertainment in the fidelity with which the story was told, and the accuracy of its nauseating incidents.

The stories of the debaucheries of the gangs of so called respectable men, in the hearings of the Thaw trial are repeated not daily, but hourly in this broad land.

The reader will ask, "what will you do about it?"

I do not know; I called her over the long distance phone on receipt of the message, and she declined financial aid. She said, in oh, so weary a voice, "This is my fight, the battle of a woman's heart and soul and I must win it alone, and then, oh, God, sometimes I get so rebellious and so desperate, and I wonder, wonder—what is to be the end."

And with all this, I wonder; what is to be the end, not for some particular woman, but for this nation, where the hellish demand of creatures of fair fame as men, keep on increasing the demand for womanly purity as their foul plaything.

The story so far is but the fourth act in this tragedy of womanhood.

The first was when I was consulted as to the cause of her sterility, and was unable to answer, though later developments showed that the examination had been given to the wrong member of the marital pair. The husband, a few years ago was from home on a business trip, and when he came home had a severe attack of gonorrhea, which did not yield to ordinary treatment, and when I was consulted by mail, I noted conditions that led me to suspect a latent case of lond standing, and pressing for a truthful answer as to any previous infection, was met with the surprised statement that he had not "been infected since a year before marriage, and that was dried up in a few days." The bacteriological examination revealed that the man was sterilized, presumably by inflammation closing the vas deferens.

The woman knew of the case, and learned-of the results of the microscopic examination, but accepted the explanation that the foul disease had been contracted sleeping between soiled sheets.

Here are acts one and two, for the marriage was a farce, as the primary object was defeated by the wrongs of the partner, who came to the firm bankrupt in its most vital requirement, so that a woman with the maternal instinct as fully developed as in any woman I have ever known followed by the infidelity, that resulted in this gravest of insults that may be offered a true woman.

Only those who have known the bitterness of the empty mother heart

yearning for the children that are not, and through no fault of theirs, can comprehend the tragedy that lies in this condition. I have seen many, and yet I appreciate only dimly.

Then the financial conditions, previously told, came on this woman and she took up the burden of providing a shelter and food; then there came the third and cruelest act in all the tragedy.

Late in the autumn my phone rang, and I was asked to reverse a long distance call which I did. It was this same woman, and she was wild with horror. She had missed one of her menstrual periods and the husband, with the complacent superiority of an average man had accused her of being with child, and reverting to the examination of himself had said: "You know that I cannot be the father," and had abused her with questions, insults and threats that drove her frantic.

When she called me she had been walking the streets all day and to her cry for advice, I sent her to a lady physician whom I knew to be a true good woman and the trouble was soon explained.

I shall never forget the wail with which she said over the phone, "Doctor when he said those awful words, something snapped within me, and now the thoughts of motherhood are a horror." I have never known a more damnable illustration of the double standard's injustice than this story.

With all this, she tells me of her "Duty," and that her husband loves her, and cannot bear to miss seeing her long, that he becomes frantic when she is from his sight for more than a day.

Tragedy, a tragedy that has for its sole basis illicit sexuality which seeks to dignify itself by assuming the holy name of love.

THE PROPHYLAXIS OF VENEREAL DISEASES.*

M. A. DESMOND, M.D.,
Akely, Minn.

This is a large subject and a discussion of which even a few years ago was looked down upon by some of the so-called "big men" in medicine. Preventive medicine has a large field today and many subjects of vital importance are looked into. The mere presence of a leper or one afflicted with bubonic plague is enough to get into action the wheels of the mighty government to prevent further contagion. But what action is taken if syphilitics by the hundred are mingling with you?

Preventive medicine comprises the whole of medical science. In times past the medical man and the public at large regarded diseases as a heaven-sent punishment. Then came a period when, through the advanced knowledge of the medical men, the public saw that certain epidemics and contagious diseases could be prevented. This education was slow and the people "had to be shown" before they would agree to any drastic measures. The public will insist on the removal of any foul-smelling garbage, etc., but the majority of this same public will meet your talk on the venereal peril with an uninterested stare. The general ignorance in sexual matters is appalling. It is ignored by the parent, teacher and until quite recently by the medical profession. Ignorance and disregard of the simplest hygienic laws are responsible for the number of persons afflicted with the various sexual diseases in this country. The sexual question has always been treated with the utmost secrecy. Parents thought it best to protect their children from infection by keeping them in ignorance. How many syphilitic children are brought into this world to suffer a curse for which they are not responsible? The statistics of the eye specialist will tell you how prevalent

is gonorrheal ophthalmia. Gonorrhea is a great source of revenue to the gynecologist by reason of the number of pus tubes he has to remove. The private sanatoria are crowded with the victims of parasymphilis. It is stated that the number of syphilitics in the United States number 5,000,000. A goodly number to be sure, but think of what they can do to those not infected! Can any man estimate with any degree of certainty the number of those that are or have been infected by the gonococcus? In taking case histories you will get this answer from a large number of your men patients: "Had a dose of clap several years ago." Statistics up to date in this line are more or less guesswork. They are hard to get. A person afflicted with syphilis or any other venereal disease can become your intimate friend and still conceal it from you. But it is a fact that gonorrhea, syphilis and their sequelae cause more suffering and more deaths than any other diseases.

Just a few words on the classification of sexual diseases: There are two classes, the contagious and the non-contagious. Under the non-contagious we have, first, masturbation; second, pollutions, or nocturnal losses caused almost invariably by excessive masturbation; and third, sexual neurasthenia.

The contagious sexual diseases are gonorrhea, chancroid and syphilis. I do not need to go into the diagnosis of the contagious or non-contagious classes. It will be sufficient to take up a few of the preventive measures in dealing with the contagious class.

What can we do? First, our greatest move should be in the line of education. A class of sexual hygiene should be incorporated in our public schools. Mothers ought to instruct their daugh-

*Read before the Upper Mississippi Medical Society, Oct. 8, 1912.

ters and fathers their sons in the matters pertaining to the sex. I think I am correct in saying that the confidence thus inspired in their children will amply repay the parents for their painstaking. The most thorough knowledge in regard to the details of venereal infection does not mean an absolute avoiding of all danger. We know that even a person who knows very well, when blinded by passion, may commit acts of indiscretion and then acquire any of the contagious sexual diseases. There can be no question but what children ought to be taught sexual along with general hygiene. Parents and teachers ought to be instructed so that they could properly instruct those in their charge. Today the people at large are taking more interest in things pertaining to the general health and it ought not be a hard matter to get them interested in this vital question. Of course there are a few so-called "nice people" who are afraid to hear anything that has any bearing on the sexual question. There must be a way to reach these people. You have all probably met in your practice the man that was sure of his own sacred person and thought that no harm could come to his family, and seen him finally wake up some day and find his son or daughter infected with one of these diseases. The most potent remedy, I think, is education along these lines, coupled with, if I may say it, the element of fear. I will not dwell long upon the role that alcohol bears upon this question, but will merely ask you, in passing, to review the number of patients that have presented themselves to you for treatment; were not the larger number of them under the influences of alcohol when infected?

The next item that I shall bring up for your consideration is one that we must face boldly, namely, prostitution. Where do most of our patients become infected? From prostitutes, certainly. This means both open and secret pros-

titution. The remedy ought to be simple; it looks simple, but is it? Can we abolish prostitution? The so-called good people, the pious people and all those who would like to be taken for such never cease to clamor for the abolition of prostitution. These people readily ignore that fact which history teaches, that prostitution cannot be abolished. Look at this from all sides and look at it, calmly, and I think you will agree with me that it would be an ideal world without prostitution; but having it, what can we do? No one can explain the fact, but nevertheless it is a fact that there are several million prostitutes in the United States, and a certain large percentage of these are infected. The necessary thing is regulation. What causes prostitution? It is claimed that about 90 per cent of all prostitutes are born prostitutes, that they are degenerates and come from the lowest and most ignorant classes. Whose blame is it that there are such low classes of people? Whose blame is it that they are ignorant? What of the remaining 10 per cent who are tricked into prostitution? Shall we disregard this large number? Ignorance, then, is the most important factor, natural inclination to prostitution is another; also, I might add seduction and bad example. It is said that the American people will never consent to recognize and regulate prostitution, and we must ask, why? We speak of liberty and freedom as a beautiful thing, but do we mean the liberty to offer and give gonorrhea, and syphilis to the unwary, the ignorant and even the intoxicated? Surely no person craves for these diseases. You might say that control of prostitution can't accomplish very much, but suppose it just saves a few from infection, isn't it worth trying? I might say that my idea is a kind and charitable treatment of the prostitute, segregate them, educate them and place the diseased ones in a hospital until cured. Medical supervision of prostitu-

tion in most of our large cities has been a farce. The position was a political one and it is a rare case to find a well qualified physician, one who can recognize venereal disease when he examines, in charge of this work. A qualified physician should be put in charge, examination made at irregular intervals and quarantine of the house should be maintained until the party infected is placed in a hospital where she can obtain proper treatment. The number that could be kept from contracting venereal infection is enormous, and the proper regulation of prostitution spare the greater number of them. Now, what is our duty as physicians? Why do the quacks get so many venereal cases to treat? Physicians as a rule do not spend enough time on these cases, a patient comes to you with gonorrhea, you prescribe an injection and something internally, collect your fee, and that is probably the last you see of your patient. This patient, unless properly cured, can infect some unsuspecting woman and she in turn will infect the next victim, and there you are. Wouldn't it be better to treat the patient properly, see that his cure is established before you lose sight of him? Make him understand his disease, let him know that it takes more than a few days to cure him. These same suggestions apply very forcibly also to those infected with chancroid and syphilis. If all the people that are infected with venereal diseases were controlled and properly treated, the matter of eliminating these diseases would then be simple. This you will say can never be done, because these are "private diseases"? How long, may I ask, do they remain private? **We can certainly reach the larger number of these cases and it is up to us to cure those that present themselves to us for treatment.**

A law compelling all persons about to be married to be examined by competent physicians would be effective. To escape any infection one must not expose himself; this is all right theoretically, but will it work out in practice? The sexual function cannot be eliminated in most people.

If there is a way to escape possible infection, is it wrong to let the public know this? This might be morally unwise, and it might give the public the impression of safety. There is no certain preventive except continence. Nevertheless a large number of those that are exposed could avoid infection if they would follow the rules laid down by the navy. Briefly it is this: Each one having sexual intercourse is given an injection of 5 per cent argyrol solution and also 30 per cent calomel ointment is rubbed in well over the penis. This procedure is carried out within twelve hours after the coitus. The result so far has been encouraging, and they hope to greatly diminish the amount of venereal infection by this method. A somewhat similar procedure has been used in Europe with indifferent success, probably due in a large measure to carelessness.

In summing up, let me again state that education of the people as a whole is the factor of greatest importance. Let the government recognize these diseases as they should be recognized. It is up to the medical profession to do the educating. It will do no good to just discuss this among ourselves. Until the people are fully awakened to this great evil our little talks among ourselves will amount to nothing. Hypocrisy and prudery must be eliminated when dealing with this question. Teach the truth, let everyone know of it, and begin with the children.—St. Paul Medical Journal, Dec., 1912.

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Editor

GEORGE L. SERVOSS, M.D., Gardnerville, Nevada.

Associate Editors

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E. L. Williamson, M.D.....Reno

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Rein K. Hartzell, M. D.....Reno
Donald Maclean, M.D.Carson City
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John N. Hurty, M.D..Indianapolis, Ind.

Now that Doctors Hartzell and Walker have given us a couple of articles, we shall anticipate that the rest of our Nevada doctors will follow their example, thus assuring us that we may have our pages filled with purely local matter every month. Please remember that our last mailing day, prior to publication of the July issue of the Journal, will be June 5th, so kindly send your copy to our editor as early as possible, that he may have time to go over it carefully. You all have something to offer, and we shall look forward to the receipt of your paper between now and the date mentioned.

It is said "that you can drive a horse to water, but that you can not make him drink." Just now, there is an attempt being made to discourage the use of bacterial vaccines, or rather their use in those cases of mixed infection, wherein the infective agent is difficult to determine. Some tell us that we should not employ the mixed bacterins, or vaccines; those of polyvalent force, but should know absolutely just what we are combatting. This in spite of the fact that good results have followed the use of such agents. These few

would have us depend wholly upon the opsonic index, despite the fact that many of our leading observers have found that clinical manifestations are as equally valuable as is the opsonic index, in many instances. Of course, we will be told what we must, and must not do, but nevertheless, it is very probable that many will go on, as in the past, relying upon their own personal observations and experiences, doing as they see fit, regardless.

The argument that we should not employ bacterial vaccines without first making perfect determinations of the infective agents present, in view of the fact that the vast majority of recognized authorities tell us that these products are harmless, sound a good deal like "bosh." Of course, the "negative phase' may be a trifle unpleasant, but it is only transitory, if present at all, so what of it! The general consensus of opinion bears us out in saying that the vaccines should be employed, regardless of the fact that we may not know just exactly what infective agents are present. The subject has had sufficient study to allow of a determination of the prominent infective agents,

through clinical observation, as well as those of a subsidiary nature. Consequently, we emphasize the fact that the vaccines should be employed, if only upon a basis of clinical manifestations.

In view of the fact that inoculation against typhoid fever has been followed with such astounding results in the American, British, German, French and Indian armies, it should be made a matter of routine practice in every community that the local health officers insist upon the vaccination against this disease. The showing in the American army, recently in encampment in San Antonio and Galveston, emphasizes the value of the procedure in such a way as to make any argument against it out of the question. Those who are chronic "carriers" of the disease organisms, as "Typhoid Mary," should, by all means, be inoculated, as it has been shown that such persons are a constant menace to the communities in which they live. It has likewise been shown that such "carriers" may be rendered harmless through immunization. This is a matter which should be considered by every state and local health official.

In Russia, in the face of epidemics of scarlet fever, it was found that by inoculating with streptococcus vaccin, an immunity against the disease obtained. Those inoculated escaped. The schools were not closed on account of the epidemics and business was carried on as though the disease had not been present. Russia is supposed to be far behind the times in all ways, but despite this fact she has set an example which the so-called civilized world may well follow, in the handling of epidemics of this disease. Here in the United States we do nothing to abort epidemics of scarlet fever. We let the disease close our schools, place houses and churches, regardless of the fact that this is wholly unnecessary. This is another little point which our health officials should give prayerful consideration. An epidemic of any disease means a monetary loss,

a loss of time and a degraded citizenship among those who may succumb to the disease, as no one having an attack of scarlet fever is absolutely "whole" thereafter, at least for some time to come. It is really too bad, in some ways that America is the "land of the free," else we might employ force in bringing about protection of our citizens, such as is possible in "Darkest Russia." This is a great country, but our personal freedom invites personal selfishness, and interferes with the protection of the masses. If we were able, by force, to inoculate those who might be brought in contact with contagious diseases, our epidemics would either disappear wholly, or be of short life. Although Russia may be a benighted country, she is, at least in this particular, showing a greater civilization than is demonstrated elsewhere.

Perhaps we should say something about the Reserve Medical Corps of the U. S. army, but we know so little of the subject that we cannot well express an opinion. However, if the officers of the corps are to be of a favored few, and they appointed without regard to age, fitness, or other qualifications, let us "howl" loud and long. If this is not a fact, let us keep "mum" as the proverbial clam. We would all like one of those "feather-bed-soldier" jobs, as they are really "snaps," and we, personally, are living in hopes that one of them will be bestowed upon us.

It gives us much pleasure to offer the paper herein from Doctor Walker. This is our second article from the pen of a Nevada doctor and we are promised more in time to come. As we have said, there is no reason, with our 144 doctors here in Nevada, that we should be obliged to step out of the state for a single thing with which to fill our pages. Now that Doctors Hartzell and Walker have given us the wedge, we are of the belief that others will follow with the sledge.—Editor.

A MOTION.

We move that, following the precepts of President Wilson, in connection with the inaugural ball, that the medical associations, be they county, state or national, hereafter omit such social functions, as banquets, joy rides, high jinks, and other festivities, in connection with the meetings of such organizations. That the money expended for such amusements be employed in increasing a higher scientific interest in all things connected with medicine. That a portion of such money be expended in furnishing every live member of such societies transactions of the doings thereof.

Believing that we hear, not only one, but several seconds to this motion, the question is now open for discussion.

In the first place, although we enjoy a good time, once in a while, we do not believe that the funds for such purposes should be taken from the organization treasury. If the doctors, resident at the meeting place desire to amuse their brothers from elsewhere, let them do so from their own private funds. Those, who are in special lines of work, instead of being guilty of fee splitting with their country brethren can, in this way, return many courtesies, and so without question. If the manufacturers exhibiting their goods at society meetings see fit to entertain the members, let them do so, as they in turn will be able to show appreciation for previous courtesies extended them by the various doctors, as is the case with the specialists. And no one will question either the specialists or manufacturers for so doing, as such entertainment will not only be reasonable but just to their patrons.

Especially in the smaller states, wherein the membership of all organizations is necessarily limited, the treasuries are not more than enough for legitimate business thereof. If a single dollar is taken therefrom for entertain-

ment it means a greater loss than one would imagine. It means that such dollar would assist in defraying legitimate expenses to the end of placing the organization upon a higher scientific basis. If a dollar from the dues of each member were expended for amusements it would mean a corresponding loss to the individual, especially in those states where the members are not furnished with printed reports of the transactions. If the dollar were expended in the latter way, it would mean a gain for each individual, in that he would be able to preserve such transactions for future reference. If another dollar, per member, were required for these entertainment functions it would be a farther loss to the individual. Such a dollar could be employed in having newer ideas tested out, clinically, in the laboratory or elsewhere. This would add to the scientific interest in the organization, and would undoubtedly be the means of adding to the membership thereof.

One of our ideas in bringing forth this motion is that these entertainments do not add to the dignity of the profession. At one or to high-jinks, one at a national and another at a state meeting, it has been said the "Little Egypt," or rather her counterfeit, as she had previously gone to the happy hunting ground, cut up didos which caused remarks, other than complimentary, in the secular press the following morning. This did not, in the least, act as an educational feature, nor did it add to any dignified interest of the laity in the profession. Such an entertainment was a sheer waste of both time and money, and showed a marked degeneracy, both in the managers thereof and attendants thereto. If there are a few degenerates who must be so entertained, let them hunt up the bawdy shops or the low comedy houses, but let the decent doctors be entertained in such a manner as may not only add to their knowledge, but as well to their

dignity, and that they may retain at least a portion of their decency.

By all means expend a portion of the treasury of the organization in acquainting all just what has happened at the meetings, and see to it that they get such information at an early date, possibly before it has grown old, dried up, or mold covered. That is, furnish every live member with a copy of the transactions. There are a lot of us, for one reason or another, who are not always able to be in attendance at the meetings, and we feel that we should have at least a little something for money expended in maintaining the organization, else why pay in at all. We realize that the organization is doing all in its power to better our conditions, through legislation and otherwise, and in addition, we know that we are called upon, individually, to help out in such matters, from time to time. This latter condition makes us believe that the organization is not doing it all, especially when we are asked to take up matters in person with our legislators. This refers to those of us who have not been able to attend all of the meetings. It seems to us that other than the favored few should know just what is going on within the organization. There is not a single secret society which does not furnish its members with its transactions, and between meetings it keeps up interest therein by the means of bulletins, or other communications. In fact, practically every organization endeavors to hold the interest of its membership in giving them a knowledge of just what is transpiring within the legislative and executive bodies thereof. Some state medical organizations do furnish their individual members, and all of them, with transactions, and it is a noticeable fact that, in such states, the membership represents practically the entire profession, instead of one-half or two-thirds.

While we have not canvassed the entire profession of Nevada, we have

heard several doctors, non-members even of the county organizations, say, "why should we belong to a society which takes no interest in us personally? Why should we pay out our good money for the benefit of the few, those who court the patronage of not only ourselves, but of our local people?" We are not drawing upon our imagination when we so quote, as these remarks, or others very similar, have come to our ears on several occasions. If the powers that be in our state organization would see to it that the transactions were printed and that every doctor would be sure of a copy thereof, and before it was of the age when its whiskers had made an appearance, instead of a possible 80 out of 140 live doctors, and they are all live ones in Nevada, we would see practically every man within the ranks, and fighting, every man of them. But they say, "Oh! what's the use. The fellows who can go get what is coming to them, and as we can't go, and as our county is not big enough to sustain a local society, we will stay out and save our money."

Instead of saying to the doctors of Nevada, "the transactions of your state association will be published here, there or elsewhere and you may have them for a dollar a year," let the management arrange to have such publication made and see that every live member gets a copy, and that early, and then see what happens to the organization. The doctor who is surprised in this way is bound to bring the matter to the attention of his local brother, and if the latter sees that the state organization is taking an interest in the individual member, he in turn will, for fear of missing something, and something good at that, will undoubtedly join the organization, and that without much coaxing.

Let us "cut out" the banquets, joy rides, high-jinks and other things of this sort and expend the money in a

way which will bring better and more permanent returns.

We make the above motion in hopes that we may hear from others in Nevada and our pages will be open to discussion of the subject. The question is, shall we cut out unnecessary enter-

tainments and devote money so expended in the betterment of the society and of the individual members thereof, through furnishing each member with the transactions of all meetings, and through placing the organization upon a higher scientific basis?

THE VALUE OF THE X-RAY IN DIAGNOSIS.

M. R. WALKER, M.D.,

Roentgentologist to Sister's Hospital, Reno, Nevada; President of the Nevada State Medical Association, Reno, Nevada.

One of the most important needs in the pursuit of medicine is the making of correct diagnosis, and to this end we have to devote a large part of our time and energies. I am at this time interested in telling you what is being done in the X-Ray Laboratory of the Sister's Hospital.

I am sure that physicians as a class are not availing themselves as they ought, of this extremely important aid in diagnosis. Doubtless there are reasons: It is not practical for every physician to own an X-Ray apparatus, for to have one that is efficient for all work costs several hundreds of dollars, and then it requires no little time and skill to get satisfactory results. It is one thing to get a skiagraph and another thing to get one that shows what should be shown, and only experience will enable one to get such, and give the proper interpretation.

It is essential to remember that a skiagraph is a shadow and not a photograph, that the shadows on the plates are caused by the varying density of the tissues through which the rays have penetrated.

The laboratory of the Sister's Hospital is fitted out with modern apparatus for fluoroscopic, radiographic, stereoscopic and therapeutic work.

We are having plenty of interesting cases for study. I shall give only a few as shown by the records of the hospital.

Colles' fractures are very common.

Mr. A. fell, falling upon the out-stretched hand, no great pain at the time, some swelling; went to a physician who made an examination, pronounced it a sprain and gave a prescription for some liniment, and directed it applied and rest; in a few days patient returned complaining that he felt worse, rather than better. The physician then advised having an X-Ray plate taken. This showed a transverse fracture of radius but no displacement, the arm was then dressed with appropriate splints, making a good recovery. Patients do not as a rule object to this additional expense when it can be shown that he has been the gainer in the end—snap diagnosis are dangerous.

I would caution against relying upon the fluoroscope in any case of suspected fracture. The above case by fluoroscope did not show a fracture; the skiagraph alone is of value.

Mr. B. was brought in from the mines where he had been caught in falling rocks, suffering a compound comminuted fracture of wrist, was sent in for amputation; the skiagraph showed that it was feasible to get the fragments in position, which was done, some two weeks later another plate was taken showing splendid results, again demonstrating the necessity and advantage of conservative surgery.

Mr. C., an elderly man, while visiting a son at one of the mines, was taken with a fit, some friends, thinking he

was about to die, attempted artificial respiration; a few days afterwards Mr. C. found he could not use his right arm without great pain in the shoulder, also that he had considerable pain all the time in shoulder. The local physician examined and pronounced it a severe sprain due to the rough usage of attempted artificial respiration, it was treated with liniments, electricity, etc.; some three months after the injury he was brought to the laboratory for an X-Ray examination, the plate shows a partial dislocation of humerus. Owing to length of time since injury, nothing can be done but make the best of a bad job; an early X-Ray examination would have enabled correct diagnosis, and saved the patient much suffering and a practically useless arm.

Mr. D. complained of extreme constipation, more or less pain throughout abdomen, suspected some intestinal obstruction, given a bismuth meal, and then X-Ray plate taken, showing distinctly sacculated caecum from adhesions due to a neglected appendix, operation gave complete relief.

A number of similar intestinal disorders have been referred to us, in all of which we were able to give clear demonstrations of the trouble.

M. had several discharging sinuses about hips, to locate seat and extent of trouble the sinuses were injected with bismuth paste, using as great pressure as patient could stand, then a stereoscope plate taken, shown fully the ramifications of the disease, the advantage of the stereoscope plate being that it brought out in relief the relative position of cavities, sinuses and bones.

It cannot be denied that stereoscopic plates are of the greatest value in all cases where it is desired to get relative positions; locating bullets or other foreign bodies.

It would extend this paper to unreasonable length to give anything like a synopsis of the work that is coming to the laboratory for diagnosis such as sarcomas, tumors, tuberculosis of the bones, osteitis, periostitis, etc.

At some future time we may give some account of the work done in Therapy.

VIBRATION.

CHARLES ANDREW STARR SIMS, M.D.,
Kansas City, Mo.

Vibration is a subject which has been given not much more than passing attention and we believe that the following series of papers on the subject, which will run over three months, will be of more than casual interest to our readers. Dr. Sims, who has given especial attention to this mechanical mode of treatment of chronic diseases, gives us the benefit of his personal experiences, and in a way which is interesting.—Editor.

In presenting this subject to the reader the author must necessarily be brief in his text, as the space allotted for this subject is too limited to enter more fully upon a therapeutic agent of such importance.*

The subject of vibratory treatment will be presented in this chapter under the following headings, or divisions, viz.: History, Vibrators, Vibratodes, Treatment of Diseases, Other Diseases and Conditions Amenable to Vibratory Treatment.

*Those readers who desire to take up the study of this valuable therapeutical agent and wish a complete work on vibratory technique, are referred to the author's new book, *Talks on Chronic Diseases with Special Reference to Mechanico-therapeutical Treatment*.

History.

As early as the fifth century we have a record of Herodotus applying massage for the relief of pain and to relax muscular contractures.

Hippocrates said: "Rubbing can bind a joint that is too loose and loosen a joint that is too rigid. Hard rubbing binds, soft rubbing loosens, much rubbing causes parts to waste, moderate rubbing makes them grow." This marks the earliest record of massage handed down to us.

While Hippocrates was a great investigator and brought to light many facts which have been of ever-lasting benefit to the science of medicine, he nevertheless erred in his technique above quoted.

The author realizes that in making this assertion, he may arouse some adverse criticism, but it is absolutely necessary to make this statement in order to correct a long-standing error which the author in his long experience with vibratory treatments, has found that Hippocrates made. "Hard rubbing binds," said Hippocrates; but the modern vibratist who is successful in his practice, finds that hard and prolonged vibration is just what is needed to loosen a fibrous ankylosed joint and to reduce muscular contractures which might be involved in the limiting of the normal movements of a joint. Again Hippocrates said: "Soft rubbing loosens" (a joint or muscular contracture). Now every vibratist of much experience, knows that soft vibration (of short duration), is stimulating to all of the soft tissues of the body and hence excites contraction of the fibers and therefore instead of loosening will cause the fibers to contract by reason of the stimulation applied.

Notwithstanding the above logical theory of vibration, there are American vibratists (and authors) who practice and advise the technique of Hippocrates and it is reasonable to believe that these same vibratists are not get-

ting the full benefits from vibratory treatments they could get if they used vibration rationally.

Massage and vibration have been used in rather a primitive manner down to the last quarter of the 19th century, when it was taken up by such men as Drs. Kellogg, Sargent and others who developed it to a stage of decided usefulness. These men perfected vibrators to such a degree that splendid results were obtained by them in the treatment of those obstinate diseases, of a chronic nature, that had hitherto resisted a strictly medicinal plan of treatment. Today mechanical vibration is as firmly established with the critical, progressive physician, as is any of the other proven therapeutical agents. It has come to stay and as it is better understood, it will be more and more generally used.

Vibration.

Vibration may be, as a whole, designated portable and stationary. Portable electric vibrators are put out by the manufacturers in convenient cases built like a sample case used by salesmen and are easily carried to the home of the patient to administer treatments. The electric energy with which to operate them being easily secured from the electric light socket in the room.

The direct up-and-down (hammer or percussion) stroke administered in the correct degree of force, length of stroke, and pressure upon the parts treated, constitutes real vibration. Oscillators, chain rollers, etc., are of minor importance as therapeutical agents.

Vibratodes.

Vibratodes are small attachable (or detachable) appliances, which are attached to the handle of the vibrator and used in treating by vibration. They are made of both soft and hard rubber, to meet the requirements of the parts to be treated.

What Vibration Will Do.

Vibration is productive of decided effects on the soft tissues and various organs of the body, as is shown by the conclusions tabulated by Dr. Pilgrim, namely:

1. Increasing the volume of blood and lymph to a given area or organ;
2. Increasing nutrition;
3. Improving the respiratory processes and functions;
4. Stimulating secretion;
5. Improving muscular and general metabolism and increasing the production of animal heat;
6. Stimulating the excretory organs and assisting the functions of elimination;
7. Softening and relieving muscular contractions;
8. Relieving engorgement and congestion;
9. Facilitating the removal through the natural channels of the lymphatics, of tumors, exudates and other products of inflammation;
10. Inhibiting and relieving pain.

The physiologic effects of vibration are either stimulation or inhibition; depending upon the intensity and duration of the vibration applied to a given part or organ.

Stimulation is produced by using rapid speed with short or medium stroke and moderate pressure or contact, of short duration, of the vibrator to the part treated. Inhibition is produced by either medium or rapid speed

with a longer stroke and deeper pressure and much longer duration of vibration to the part treated.

The average time required to stimulate nerve tissue ranges from 3 to 7 seconds. The average time to produce nerve inhibition, using a rapid medium stroke, ranges from 20 seconds to 2 minutes, varying in time according to the accessibility of the nerve treated.

To inhibit or produce muscular relaxation usually requires two or three time longer than that required for nerve inhibition.

Understanding these two cardinal points of vibration, it will be clearly seen by the reader that in giving vibratory treatments, it is necessary to know whether a given part or organ should be stimulated or inhibited (sedated).

If in the treatment of a given part or organ the vibration should be painful to the patient, after a few seconds of the treatment, it would indicate that the stroke is too long, or the pressure too deep, upon the part treated. Shortening the stroke, or lessening the pressure, or doing both, will correct this error.

CAUTION—A word of caution at this point is necessary. Never vibrate over a distended pus sack in the abdominal or pelvic cavities, for the reason that the slightest vibration might rupture the sack and empty its contents into these cavities and direful results follow.

(To be continued.)

MISCELLANY—Continued

Elixir Maltopapsine.—In the gastro-intestinal arrangement of young children, as well as in anemia, loss of appetite, and to promote assimilation when the appetite is impaired, Elixir Maltopapsine (Tilden's), will be found of the highest efficiency.

Tongaline.—"Both in my practice in New York City and particularly during the summer when I am located at Richfield Springs, N. Y., a resort where thousands of rheumatic and gouty patients take the sulphur baths, I have prescribed Tongaline extensively and it has always proved most sat-

isfactory. I would state that owing to the care and skill in its manufacture, as also because it is uniform and is well borne by the stomach, Tongaline stands foremost among the ready-made prescriptions for rheumatism, neuralgia, grippe, gout, etc. Because the conscientious practitioner hesitates about having such a complicated prescription as Tongaline prepared by a pharmacist, because even if the latter had fresh and pure ingredients, he has not the facilities to compound them properly nor could he do so in any reasonable time."

The New Treatment for Gonorrheal Infections.—Physicians who have had any considerable experience in the treatment of gonorrhea and its complications, know how stubborn many of these cases are; how, not infrequently, they resist ordinary routine methods for weeks and months. The average general practitioner encounters these cases with unpleasant forebodings. He realizes that treatment of them is more or less electrical. He experiences a sense of relief when he can bid "good-bye" to one of them when he can discharge it as "cured."

For reasons enumerated, any new therapeutic agent which promises a fair percentage of recoveries in gonorrhea and its sequelae is certain to be accorded a warm reception by the medical profession.

Is Gonorrhea Phylacogen such an agent? Here is a basis for the belief that it is. Here are some figures that seem to lend assurance: "660 cases treated; 539 recoveries; 121 failures." These figures pertain to carefully recorded cases, under observation in various sections of the United States and embracing both hospital and private practice. They include such complications as gonorrheal arthritis, chronic urethritis, vaginitis, epididymitis, orchitis, prostatitis, vesiculitis, ophthalmitis, iritis, endometritis and salpingitis. These cases were reported to Messrs. Parke Davis & Co., producers of the Schafer Phylacogens. The results point clearly to this conclusion: Gonorrhea Phylacogen is worthy of careful, serious consideration.

Cod Liver Oil in Debilitated States.—The response of general debility, particularly if following an acute disease process,

to cod liver oil, in a large measure depends upon the form in which the oil is given. As to the power of cod liver oil to supply the tissues with nourishment, there can be no question, but as in most of the conditions indicating cod liver oil there is impaired digestive function, it is clearly obvious that unless care be shown in the choice of preparation, too great a strain will be thrown upon the gastric powers with consequent defeat of purpose. In this connection it should be remembered that while Cord, Ext. Ol. Morrhuae Comp. (Hagee) contains the nourishing elements of cod liver oil, it is palatable in the highest degree and does not cause the distress following the use of the oil not so treated. Cord, Ext. Ol. Morrhuae Comp. (Hagee) will prove acceptable to delicate stomachs, a feature that makes it of unusual value in debilitated states.

THE GOOD OLD SUMMER TIME.

The coming summer season will no doubt produce its usual crop of cases for physicians, peculiar to the season.

Insect bites, bee stings, sunburn and its frequently following dermatitis, strains and small joint injuries from baseball and other sports; sprained ankles, ecchymosed eyes, infected wounds, etc., will demand the first attention of the physician and a second thought will be a suitable remedy.

All inflammatory conditions, whether from infective or traumatic causes, rapidly subside when dressed with antiphlogistine. Its convenience of application, with the assurance of satisfactory therapeutic results, makes it almost indispensable in emergency work.

The Therapy of Neurotic States.—The bromides have served no more useful purpose than in those unstable nervous states so frequently met with in women, and yet owing to this very instability their administration must be supervised with the greatest care if the patient is to be guarded from the disadvantages which accompany the use of these salts.

The fact that Bromidia (Battle) represents the therapeutic height of the bromides and is free from their disagreeable side-effects, has made the bromide preparation a great favorite in the treatment of female neuroses.

From it may be expected the full therapeutic effect of the bromides with the further advantage of freedom from the untoward effects of hastily prepared bromide mixtures.

Gastric intolerance is obviated by the extreme care exercised in choosing the contained drugs in Bromidia (Battle) and in compounding them.

Chronic Catarrhal Diseases.—Chronic catarrh never fails to indicate general constitutional debility. Local treatment is always desirable, but for permanent results efforts

must be directed toward promoting general functional activity throughout the body, and a general increase of systemic vitality. The notable capacity of Gray's Glycerine Tonic Comp. in this direction readily accounts for the gratifying results that can be accomplished through its use in the treatment of all chronic catarrhal affections, but especially those of the gastro-intestinal canal and respiratory tract. The particularly gratifying features in the results accomplished by Gray's Glycerine Tonic Comp. are their substantial and permanent character. This is naturally to be expected since they are brought about through restoring the physiologic balance of the whole organism.

Ergoapiol (Smith)—Is a singularly potent utero-ovarian anodyne, sedative and tonic. It exerts a direct influence on the generative system and proves unusually efficacious in the various anomalies of menstruation arising from constitutional disturbances, atonicity of the reproductive organs, inflammatory conditions of the uterus or its appendages, mental emotions or exposure to inclement weather.

As an analgesic in gynecological cases, Ergoapiol (Smith) is superior to opium or coal-tar derivatives, in that, besides relieving pain without exposing the patient to the danger of drug addiction, it also offers a tonic and restorative action upon the pelvic viscera.

It is a uterine and ovarian sedative of unsurpassed value and is especially serviceable in the treatment of congestive and inflammatory conditions of these organs.

The anodyne action of the preparation on the reproductive organs is evidenced by the promptness with which it relieves pain attending the catamenial flow, and its antispasmodic influence is manifested by the uniformity with which it allays nervous excitement due to ovarian irritability or other local causes.

Ergoapiol (Smith) proves notably efficacious in amenorrhea, dysmenorrhea and menorrhagia.

"Save the Babies."—Perhaps the greatest perplexities in the doctor's practice are those that come in connection with the feeding of the baby that refuses to thrive. Especially during the hot months and among the bottle-fed do we find many babies who are peevish and irritable and "doing poorly" in spite of the cow's milk modified in a score of different ways and infants' foods which are tried in desperation, one after the other.

Yet the same conditions are quite frequently displayed in babies who are nursed at the mother's breast. The quality of the milk may, to all appearances, be all that can be expected, and the quantity sufficient, still we find ever and anon that it fails to provide the nourishment needed at the critical period of life.

At the hour of need comes the *B. Bulgaricus*. The best tablet culture of it for general use is Galactenzyme, made by The Abbott Alkaloidal Company. This "friendly germ" has proved to be a great aid in cases of difficult digestion; also in bowel troubles of infants.

"It is exceedingly rare," writes one doctor, "to find a child who cannot digest cow's milk (not sterilized nor pasteurized, but properly diluted for age) if Galactenzyme is given."

Add one or two crushed tablets to each feeding bottle. Or give the tablets, dissolved in a little water, after each feeding, if preferred, and in case the baby is breast-fed.

These tablets may be used for making "buttermilk," when desirable. But the fat and carbohydrate should be adjusted. To lessen the amount of fat, skim off part of the cream before curdling; to increase the carbohydrate content, add milk sugar.

It has been observed that infants so treated thrive better and are less prone to develop bowel complaints. A good plan for the doctor would be to put all his babies on Galactenzyme treatment at the approach of hot weather, as a prophylactic measure. This would surely cut down immensely the present infant mortality.

We advise our readers to send for literature on this topic; also samples for trial.

Therapy of Nervous Headaches.—The advantages of Pasadyne (Daniel), the concentrated tincture of *Passiflora incarnata*, as a means of relief in headaches of a nervous type, are so marked that it seems to warrant the distinction of being put in a class by itself. In this condition, Pasadyne (Daniel), not only soothes the cephalalgia but also exerts a potent force on the nervous element so noticeable in these cases. It may be given to women and children without causing unpleasant symptoms, oftentimes a feature of other agents. A sample bottle for trial may be had by addressing the laboratory of John B. Daniel, Atlanta, Ga.

The Uses of Digitalis and Strophanthus.—Among the heart tonics, Eichhorst mentions a considerable number as demonstrably of value as shown by animal experiments, but concludes that clinical experience indicates that only two are reliable—the preparations of strophanthus and those of digitalis. While in the opinion of the author strophanthus deserves the first place, according to experimental researches their relations must be reversed in practice. Digitalis is the medicament of first choice. Of the preparations of digitalis, Eichhorst gives the preference to the powdered leaf and to the Digalen of Cloetta.—"Practical Medicine Series." General Medicine, Vol. 1. F. Billings and Salsbury, page 208.

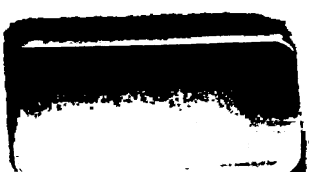
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